

*Dedicated to promoting the research and education programs of the
Henry A. Wallace Beltsville Agricultural Research Center, Beltsville, MD*

THE FAR-B NEWS

January 2007

Editor: Hank Becker

AREA DIRECTOR'S MESSAGE

In the last Director's message back in June, it was noted that the three most important issues at BARC are funding-funding-funding! At that time a number of budgetary decisions were still winding there way through the halls of Congress.

As we all are aware, a lot of changes have transpired since then! The House did 'mark-up' the 2007 budget but the Senate never acted on the USDA 2007 appropriations. As it turns out, Congress told agencies to use the 'mark-up' from the House or the fiscal year 2006 appropriation level, which even was lower. Since there was no Senate mark-up, the 2007 projection was 6 percent lower than the 2006 appropriations.

Bottom line: ARS has been under this six percent reduction since October 1, 2006. What the final decision of the fiscal year 2007 appropriation will be is still unclear but hopefully the situation will be clarified by the middle of February, if not sooner!

Budgetary issues also led to a request for Voluntary Early Retirement Authority and Voluntary Separation Incentive Payment (buyout) authority for the Beltsville Area. We received approval for up to 160 slots for these actions. The window for employees to sign-up just closed on January 16. A total of 63 employees have accepted early retirement.

On a brighter note, as of late November, Mrs. Tracey Wilson came on board as our

new Facilities Director. Mrs. Wilson has been a planning/design professional for more than 18 years. She is a native of Washington, D.C., and has a Bachelor of Architecture with as secondary concentration in urban planning. Her most recent federal employment was with the Department of State's Overseas Building Operations Bureau as a Design Manager and Planning Integration Manager.

In December 2006, we signed a non-funded Cooperative Agreement with the Metropolitan Washington Council of Governments (COG). The purpose of the agreement is to strengthen cooperation in a collaborative effort to fulfill the applicable commitments of the Chesapeake Bay Program as well as the general goals of the 2001 Anacostia Watershed Restoration Agreement. We have been working with COG towards a range of restoration goals since 1988. Approximately 98 percent of the BARC landmass as well as the US National Arboretum lie within the Anacostia Watershed.

Three BARC scientists have been noted for there research accomplishments. Dr. Vern Pursel (retired) was one of the 2006 inductees into the ARS Hall of Fame. (See article page 3). Dr. Doug Bannerman of our Bovine Functional Genomics Laboratory was named the 2006 Herbert L. Rothbart Outstanding Early Career Research Scientist. And Dr. Max J. Paape, also of the Bovine Functional Genomics Laboratory, received the 2006 Distinguished Senior Professional Rank Award for his work on cells in milk and the

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role that they play in defense of the mammary gland against bacteria that cause mastitis.

Finally, many of you may have seen our new *Current Research Impacts* booklet. It is a compendium of current impacts on private companies, agricultural commodities, and much more. The booklet is available at <http://www.ars.usda.gov/ba/currentimpacts>.

Phyllis Johnson, *Area Director*

NATIONAL AGRICULTURAL RESEARCH ALLIANCE FORMED TO SUPPORT BARC

The dream of a National Agricultural Research Alliance-Beltsville (NARA-B) to support the short and long-term interests of BARC is no longer a dream. Except for the legal formality of handing the Alliance over to its official board and officers, it is a reality. The organization may frequently be called the Beltsville Alliance. But to most organizers the words "Beltsville" and "National" are virtually interchangeable. Many organizers see Beltsville as a "national", "flagship" agricultural research center. They see BARC for now and the future as an indispensable source of national research outcomes and impacts.

Many people contributed to creating the Alliance. None have been more steadfast or influential than John Peter Thompson, Chairman, Behnkes Nurseries, also Chair-elect, Prince George's County Chamber of Commerce. His tireless, creative leadership provided the spark to move the organization forward. Fortunately, his drive and perseverance will be available to the Alliance as it moves from basic organizational modalities to programmatic action.

Others--too many to name here--made vital contributions. Markian Melnyk, a College Park attorney, drafted the organization's Articles of Incorporation and By-Laws, and then successfully

shepherded them through the Maryland state authorization process. Another vital contributor is Wanda Plumer of the Prince Georges' County Economic Development Corporation. A former president of the Goddard Alliance, Wanda brings extraordinary expertise to NARA-B. Fortunately, Wanda, Markian, and John Peter appear to be in for the long haul.

FAR-B too has made its contributions. It sponsored and financed the first public organizational meeting last November 17. Several board directors--notably Darwin Murrell, Essex Finney, Vernon Pursel, and Jim Anderson--provided initial advice and counsel. Jim Butcher has served as FAR-B liaison from the beginning.

So, where does the Alliance go from here? Thompson has met with ARS Admin. Edward B. Knipling to discuss Alliance purposes and goals. According to all reports, that meeting went extraordinarily well. Plans are well along to invite a delegation of Congressional staffers to BARC in the coming weeks. Hopefully, that meeting will help lay firm groundwork for orderly communications with key Congressional offices. Also, in coming weeks, the NARA-B will put together a mission statement and identify special projects of emphasis.

Jim Butcher, Legislative Liaison and Community Outreach Chair

UPDATE ON 2007 CFC CAMPAIGN

The kickoff for the BARC Combined Federal Campaign began on November 15. Our committee tried a new approach to campaigning for CFC funds. This year, we used a direct approach by contacting all of the scientists at BARC in various laboratories.

There are 33 labs in three institutes, employing 285 scientists in these labs. Our objective was to supply each scientist with a brochure explaining the benefits of

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supporting CFC. All toll we sent out 414 brochures. We hope this new approach will increase our FAR-B income through these CFC contributions.

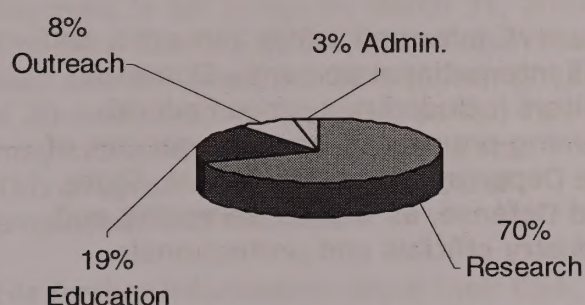
One of our goals for 2007 is to honor Dr. John Moseman. Mrs. Moseman contributed \$2,000 to FAR-B to establish a fellowship program commemorating his contributions to BARC's research program. In addition, we received a contribution of \$1,100 recognizing Dr. Moseman's scientific contributions. (See article page 6)

A similar program was initiated several years ago when Mrs. Mike Faust contributed funds to support research in one the Fruit Lab in memory of her husband.

Phil Kearney, CFC Chair

FINANCIAL REPORT

Once again FAR-B turned to financial reserves this year to cover the Professional Travel Grant of \$20,000 allocated to the three BARC institutes according to their number of SYs and \$12,485 to fund three Innovative Ideas Awards to BARC scientists.



On the income side of the balance sheet, the funds received through CFC contributions were \$1,500 lower than in 2005. Fortunately, incoming funds from membership dues, donations from members, and interest on investments were considerably higher than in 2005. The graph below shows the distribution of FAR-B's expenses. Please note that only three cents of every dollar goes to

administer FAR-B's program, and much of that went for printing and mailing of The FAR-B News and printing of FAR-B's new membership brochure.

Vernon Pursel, Treasurer

POINSETTIA SALE NETS \$500 TO HELP FAR-B

Thanks to Freddi Hammerschlag, who originated and executed her suggestion, FAR-B organized its first plant (Behnkes poinsettias) sale in Fall 2006.



Freddi Hammerschlag and Hank Becker

Notices were sent out to all FAR-B members and to Beltsville Agricultural Center (BARC) employees in November. Pick-up was held in the National Visitor Center on December 6. We sold 135 Poinsettias plants for \$12.00 each. The money collected from the poinsettias has gone into the FAR-B travel fund for BARC scientists. FAR-B hopes to hold this sale again in 2007 in addition to a chrysanthemum sale in early fall.

Freddi Hammerschlag, Board Member

FAR-B TREASURER INDUCTED INTO ARS SCIENCE HALL OF FAME

On September 13, 2006, Vernon Pursel, who is recognized worldwide for reproductive and genetic technologies in farm animals was inducted into the ARS

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Science Hall of Fame. His influence on gene engineering and his development of frozen swine semen has profoundly influenced animal and biomedical science. Freezing of swine semen for artificial insemination was unsuccessful until the 1970s when Pursel developed a procedure that is used to this day.



ARS Administrator Ed Knippling, Vern Pursel, and Area Director Phyllis Johnson

Advances resulting from his research have increased use of artificial insemination to include over 80 percent of the U.S. swine herd. In 1984, Pursel and collaborators were the first to successfully transfer foreign genes into farm animals. Their centrifugation technique made methods used in mouse experiments possible in pigs and cows, and they proved gene transfer is practical in farm species

Transgenetic technology promises better animal growth and milk production, enhanced disease resistance and higher quality food, as well as inexpensive farm production of human medicines.

Since 1986, the Science Hall of Fame program has recognized outstanding ARS researchers for their career achievements. Those inducted are nominated by their peers for making major contributions to agricultural research. The scientists must be retired, or eligible to retire, to receive the award.

Pursel's awards include being named a Fellow of the American Society of Animal

Science (ASAS) in 2004 and receiving the ASAS Award in Animal Physiology and Endocrinology in 1995, USDA Unit Award for Distinguished Service in 1989, and USDA Superior Service Award in 1977. His research has had a major impact on methodologies used by other scientists.

Beside Vern, two other current FAR-B board members have been honored among the Hall of Fame Awardees -- FAR-B president Darwin Murrill in 2002 and Symposia Chair Mort Boroza in 1997.

NATIONAL VISITORS CENTER ATTRACTS GROUPS FROM 28 COUNTRIES

In 9 months from April through December 2006, approximately 176 groups visited the ARS National Visitor Center (NVC) in Beltsville. The groups consisted of 3,232 individuals from over 28 countries.

These visitors learn much about the breath of ARS's mission and research goals and accomplishments. They include domestic and international professionals and dignitaries, consumers, and Federal employees from various agencies.

The NVC informed 2,906 domestic, and 355 international persons. Domestic visitors included numerous Federal training programs from the agencies of the Departments of Agriculture, State, and Defense, as well as university and industry officials and professionals.

International delegations included several ministers of Agriculture, Embassy officials, and a delegation of professors from Baghdad University in Iraq, who have applied for a CSREES research grant directly as a result of their visit to the NVC.

Jennifer Woodward-Greene, Director National Visitor Center

FRESH, ORGANIC FARM PRODUCE NOW AVAILABLE FROM CALVERT FARM

Calvert Farm, located in Cecil County, Maryland close to the borders of Pennsylvania and Delaware, is a small farm, certified Organic by the Maryland Department of Agriculture. They are a member of the Maryland Organic Food and Farming Association and the Maryland Certified Organic Growers Cooperative. The farm is working with five other small family farms to bring subscribers the best variety and freshest farm grown fruits and vegetables to your table.

Calvert Farm also has a Community Supported Agriculture (CSA) produce subscription. Anyone interested can fill out an application to apply for a subscription to 20 weeks—May 20 through September 30—of farm fresh produce. Produce will be delivered to USDA BARC/NAL in Beltsville on Mondays from 1 to 4 p.m. Limited CSA subscriptions are available on a first come, first served basis.

A subscription for the 2007 growing season costs \$40 for a non-refundable reservation fee (due by Feb 15th). Payment in full is due by March 31, 2007. The total due will be \$40 reservation fee plus \$20 per week per box. (1 box @ \$20 X 20 weeks plus \$40 equals \$440.) You may subscribe to more than one box. This program is available to federal employees and retirees.

For further information about their CSA, phone 410-658-3914 or email them at farmer@calvertfarm.com. Subscriptions are available on line at www.calvertfarm.com. Print out this form, fill it out, and mail it Calvert Farm.

The farm welcomes your questions and encourages visitors. It thanks subscribers for their interest in Calvert Farm. Your subscription helps keep the family farm alive and well.

MEMBERSHIP UPDATE

During the last few months, the FAR-B Board has initiated an effort to try to increase the number of Sustaining, Patron, Personal, and Associate members in the organization. As we identify retirees and former BARC employees, letters are being sent inviting them to join our ranks.

As a result of this initiative, we would like to welcome Tim Clark, Ed Dougherty, Julius Menn, Jerrell Powell, Roger Ratcliffe, Alley Watada and Richard Zimmerman as new members of FAR-B. This effort will continue as other potential members are identified.

We are also in the process of developing a new Membership Directory that will be mailed with this newsletter to all FAR-B members. We hope that when you receive your copy, you will find it useful for getting in touch with acquaintances and former colleagues and also for identifying people who are not FAR-B members and urging them to join.

If you prefer, you can send the names and addresses of potential members to us and we will follow-up.

Allan Stoner, Membership Chair

IN MEMORIAM

John G. Moseman

John G. Moseman, 84, a USDA scientist who specialized in studying the pests that infect barley, died of lung cancer on July 24 at his home in Gaithersburg.

During his more than 40 years at the USDA, Dr. Moseman, helped scientists and farmers understand powdery mildew and leaf rust, pathogens that can damage and destroy the cereal grain. Using both traditional and new techniques, he bred

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strains of barley that proved resistant to these diseases.

A major food and animal-feed crop, barley is used in both bread and beer and has been cultivated by humans since the late Stone Age in the Middle East. It was a staple food of ancient Egypt and is still among the top three crops grown worldwide.

Dr. Moseman, who wrote more than 100 research papers, coordinated international research projects and was the keynote speaker at many worldwide conferences on cereal crops, did his best to maintain the scientific ethos of sharing knowledge worldwide, despite politics. During the late 1960s, he coordinated two similar research projects, one with an Israeli scientist and one with an Egyptian scientist. He organized a meeting with the pair at the U.S. Embassy in Madrid, allowing them to share data that led to the much-needed development of drought-resistant strains of barley.

When diplomatic issues in the 1960s made contact between American and Soviet scientists exceedingly difficult, Dr. Moseman arranged for plant material and genetic information to be transferred to a Canadian scientist, who could relay it to the then-Soviet Union.

In 1972, Dr. Moseman became chairman of the USDA's Plant Genetics and Germplasm Institute in Beltsville. He retired in 1986.

Born in Oakland, Neb., he grew up on a farm during the Depression. After graduating from high school at 16, he spent a year working with his father and older brother developing hybrid seed corn. The seed had to be stripped from each cob and carefully sorted by hand. "Moseman and Sons Iowa 139 Seed Corn" was the first certified hybrid seed corn sold in Nebraska.

He graduated from the University of

Nebraska at Lincoln and immediately entered the Army Air Forces. He was trained as a meteorologist at New York University and served as a weather forecaster for a B-29 squadron based in Fairmont, Neb. He later served in Puerto Rico and Guam.

After his discharge in 1947, he received a master's degree in plant genetics at Washington State University in Pullman, Wash., and a doctorate in plant pathology from Iowa State University in Ames.

Dr. Moseman joined the faculty at North Carolina State University in 1950 on a joint appointment with the USDA research station in Raleigh. In 1954, he was transferred to BARC, where he served as a bench scientist before becoming leader of barley investigations and, finally, chairman of the institute.

Dr. Moseman was a fellow of both the American Association for the Advancement of Science and the American Phytopathological Society. He belonged to the honor society Phi Kappa Phi and to Sigma Xi, the scientific research society. After his retirement, he was president of FAR-B from 1993 through 1995.

Survivors include his wife of 58 years, Marjorie Jean Bell Moseman of Gaithersburg; three children, Dr. David R. Moseman of St. Paul, Minn., the Rev. Barbara Smith of Nevada City, Calif., and Tom Moseman of Equinunk, Pa.; and a brother.

Lowell E. Campbell

Lowell Eugene Campbell, 84, of Frederick, died on Saturday, Aug. 21, at Homewood at Crumland Farms, Frederick. He was the husband of Deborah Kreidler Campbell for 56 years.

Born on June 13, 1920, in Preble County, Ohio, he was a 1938 graduate of Lanier High School and attended Ohio State University before his military service.

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After graduating from the Army Air Force technical school at Yale University, he served in the Army Air Force during WWII as an airway communications officer in India and Burma. After his military service, he received degrees in engineering and agriculture at Ohio State University.

He was employed by USDA from 1947 to 1985 at Beltsville, and authored or co-authored more than 50 technical publications, including book or handbook chapters concerning forage harvesting, dairy equipment, farm lighting, standby electric generators, greenhouse and plant lighting and environmental requirements for plant growth.

Mr. Campbell was a member of the American Society of Agricultural Engineers, the American Society of Heating, Ventilating and Air Conditioning, the Institute of Electrical and Electronic Engineers, the Washington Society of Engineers and the Washington Academy of Science, serving on numerous technical committees of these organizations. FAR-B records show he was member from 1986 to 2004.

Besides his wife, he is survived by three children, David Campbell and wife Paula of Ellicott City, Jane Brockman of Brunswick, Ga., and Ellen Campbell of Baltimore; six grandchildren, and a sister, Miriam Campbell Lucas of Columbus, Ohio.

Frederick Gustav Meyer

Frederick Gustav Meyer, 88, the director of the herbarium at the US National Arboretum, died of pneumonia Oct. 13 at his home in Silver Spring. He had Alzheimer's disease.

Dr. Meyer was born on Dec. 7, 1917, in Olympia, Wash. He graduated from Washington State University, where he also received a master's degree in botany in 1941. He served in the Army medical corps in Europe during World War II and

settled in St. Louis, where he earned a doctorate in botany from Washington University in 1949. He did postdoctoral work at University College in London and then returned to St. Louis to work in the Missouri Botanical Gardens.

In 1956, Dr. Meyer became a research botanist and taxonomist in the New Crops Research Branch at BARC. In 1963, he joined the arboretum. Under his leadership, the herbarium doubled in size and he was instrumental in acquiring important collections.

He worked for 15 years on researching and writing a book, published in 1994, on the cultivated woody plants of the southeastern United States. He also worked for 30 years updating and translating *The Great Herbal of Leonhart Fuchs*, a 16th-century treatise on almost 500 species of plants. He retired in 1991 but continued consulting until 2001.

Dr. Meyer was considered one of the nation's best taxonomists in identifying cultivated plants, and he researched plants around the world. His main interest was in the classifications and relationships among ornamental plants, but he also became an expert in medieval botany and personally introduced the hereditary material of several thousand plants to the United States.

He was the first in modern times to collect the genetic resources of native wild coffee from southern Ethiopia. In 2002, with archeologist Wilhelmina Jashemski, he co-edited an acclaimed book, *The Natural History of Pompeii*. He identified the plants that were blooming in the gardens of Pompeii when Mount Vesuvius erupted in 79 A.D.

Dr. Meyer's first collection trip, to southern Europe for nine months in 1959, resulted in the identification of 2,800 types of plants. On the second trip, in 1963, he identified and collected an additional 1,200 specimens.

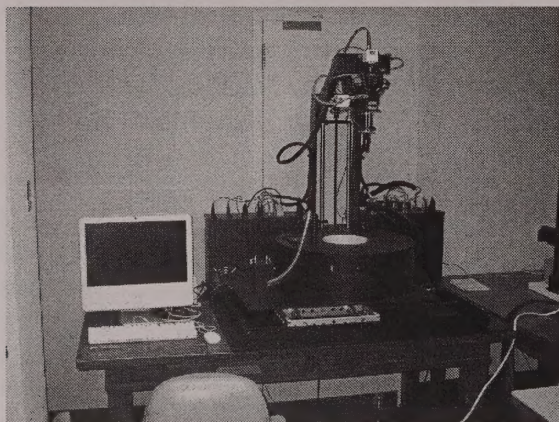
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He lived in a Takoma Park house built in 1887 that had a large garden where he grew plants he had collected during his travels. When Dr. Meyer moved to a retirement community in 2000, he donated more than 23,000 plant specimens and 700 books, some from the 16th century, to the Arboretum.

He married Lillian "Jean" Nicholson Meyer, a botanical artist who contributed to his works, in 1946. She died in 1983. They had no children, but he is survived by a sister.

FAR-B FUNDS HIGH-TECH MICROSCOPE

In 2004, the FAR-B Board of Directors felt FAR-B should be doing more to help the research effort at BARC. One way to do this would be to help fund new research equipment. After discussion with the Area Office, the FAR-B Board of Directors funded \$25,000 for the Systematic Entomology Lab to help purchase a state-of-the-art Remote Imaging System (RIS) built by Photografix, Inc. that allows researchers at the Natural History museums in Washington, DC, London, and Paris to remotely view specimens, particularly type specimens, that determine the valid taxonomic name.



The microscope allows researchers at the Natural History museums in Washington, DC, London, and Paris to remotely view specimens.

Board of Directors

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Legislative Liaison & Community Outreach:	Jim Butcher <i>jim.hickory@verizon.net</i>
Publicity:	Hank Becker <i>hankbecker3@verizon.net</i>
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Liaison with BARC:	David Chitwood <i>chitwood@ba.ars.usda.gov</i>

To contact the FAR-B Board

email – *farbboard@comcast.net*
phone – (301) 854-9758
<http://www.ars.usda.gov/ba/far-b>

Beltsville Area

Area Director:	Phyllis Johnson
Associate AD:	Ron Korcak
Nat'l Visitor Center:	Jennifer Woodward-Greene

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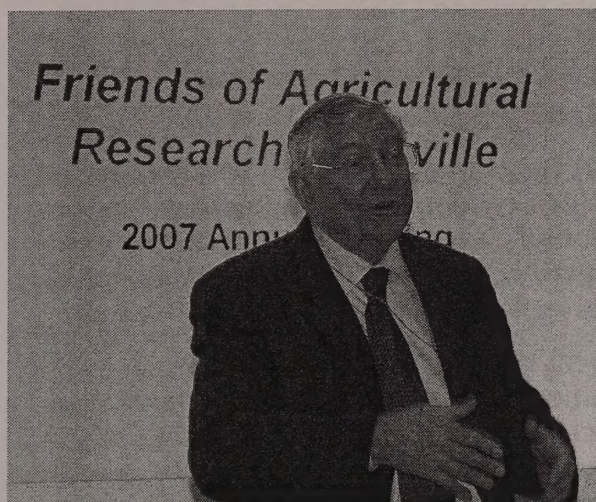
June 2007

Editor: Hank Becker

Annual Meeting Features Under Secretary

At the May 14 Annual Meeting of the Friends of Agricultural Research-Beltsville, Inc., FAR-B president Darwin Murrell President introduced the meetings speaker, Dr. Gale Buchanan, Under Secretary for Research, Education and Economics, USDA. Dr. Buchanan spoke on the "The Excellence of the Beltsville Area."

He mentioned his admiration for the work of ARS scientists that he was familiar with from his many years of work at the state level. He also talked about his idea of combining the National Program Staffs of ARS and the Cooperative State Research, Education, and Extension Service (CRSEES) and how that reorganization would benefit his office in getting information on the research projects across the nation.



Under Secretary Dr. Gale Buchanan

Following his talk, Dr. Phyllis E. Johnson, Area Director, gave some brief comments on what is happening at BARC.

At noon, there was a reception for FAR-B members and guests and at 1:00 p.m. the Annual Board of Directors Report to the Membership was held. The next FAR-B meeting is June 12, 2007. This will be last meeting until September 11, 2007.

FAR-B To Sponsor Mum and Poinsettias Sale

Because of the huge success of our Plant Sale last Fall -- we made almost a \$1,000 -- FAR-B will be sponsoring not one but two Plant Sales in the late summer 2007.

Notices will go out in August for Behnkes mums and poinsettias with delivery dates in September for the mums and in early December for the poinsettias. Again, the plants will be delivered to the ARS National Visitor Center, Bldg. 302, BARC-East. Note that the poinsettia sale is being conducted early so as not to conflict with the Combined Federal Campaign season. Order forms will be sent and/or e-mailed to members in August and will be posted on the FAR-B website (see masthead; page 8).

Proceeds from the sales will again go toward travel grants for the BARC scientists. Do share this information with friends and family and help support our scientists at BARC!

**Freddi Hammerschlag, Fundraising
Chair**

FAR-B Volunteers Needed At the National Visitor Center

The National Visitor Center (NVC) needs your help! Our biggest and most immediate need is in covering the Information Desk when Lorraine is absent. She is scheduled to be out 7/5, 7/6, 7/9, 8/23, 8/24, and 8/27.

Any part or all of those days would be greatly appreciated. For less of a commitment, and/or to get a taste of this duty, you may also volunteer for the Information desk any day from 1 to 2 p.m. Training is provided! Call (301) 504-9403.

We also need help with very large groups with multiple busses. Just let us know that you are interested, and we will contact you to see if you are available when one is scheduled.

Let me extend my and the NVC Staff's sincerest appreciation for Vern Pursel and Hank Becker for volunteering in the past! I am sure that the opportunities to serve at the NVC will continue, and become more diverse in the future!

Jennifer Woodward-Greene, *National Visitors Center*

AREA DIRECTOR'S MESSAGE

As I look out the window of Building-003, the tents for Field Day have been erected and we are looking forward to a large crowd on Saturday, June 2. As you know, we took a hiatus last year from the annual Field Day due to budgetary concerns. We also now have an FY2007 budget and an indication of what the FY2008 has in store for us.

ARS is once again faced with proposed terminations of projects in FY2008, specifically for the Beltsville Area. These terminations add up to about \$10 million. These projects were Congressional add-

ons--some of which date back to FY2001. We are hopeful that the proposed terminations will not occur but the final resolution may not be known until after Labor Day.

In the last Area Director's message, we were in the throes of the Voluntary Early Retirement Authority and Voluntary Separation Incentive Payment (buyout) authority process. A total of 63 employees accepted early retirement. These actions enabled the Beltsville Area to save about \$5.5 million and have also impacted some of the reorganizations that are currently being implemented.

The reorganization will result in the formation of some new laboratories in the Animal and Natural Resources Institute, Plant Sciences Institute, and the Beltsville Human Nutrition Research Center. There will be some personnel shifts for the U.S. National Arboretum but no reconfiguration of laboratories or units. We will post the entire reorganization scheme in the next Area Director's message.

There have been a few noteworthy transitions: two Research Leaders took the February buyout and have retired (Dr. Walter Rawls, Hydrology and Remote Sensing Laboratory, and Dr. YudRen Chen, Instrumentation and Sensing Laboratory).

Dr. Bill Kustas was selected as the new Research Leader of the Hydrology and Remote Sensing Laboratory and Dr. Moon Kim is currently serving as the Acting Research Leader of the Instrumentation and Remote sensing Laboratory.

Lastly, Dr. Harry Danforth, Technology Transfer Coordinator, accepted the position of Associate Area Director for the Midwest Area in Peoria, Illinois. A search for his replacement is currently underway.

We wish Walt and YudRen the best in retirement and appreciate their service to science, the Beltsville Area, and the Agency. We also wish Harry much success in his new role and we are sure he will find it both interesting and enjoyable.

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Many of you may already be subscribers, but one way to stay up-to-date with happenings within the Beltsville Area is to receive the monthly e-update. You can subscribe to this two page information source by sending an e-mail to BA.Office@ars.usda.gov. The current e-update as well as past issues can be found at www.ars.usda.gov/ba/e-Update.

Phyllis Johnson, *Area Director*

FAR-B Receives President's Gold Medal Volunteer Service Award

For the fourth year, FAR-B sponsored the Beltsville Elementary School (BES) science enrichment program for grades 1 to 6. This took a great effort by FAR-B members and by BARC, NAL and ARS Information Staff employee's. In recognition of the hours spent on this project, FAR-B received The President's Gold Medal Volunteer Service Award for 2007 presented by the President's Council on Service and Civic Participation. This is third year in a row that FAR-B has been recognized. This is the first year we have received the Gold Medal Award.

This year, from May 8 to 10, FAR-B members cooperating with the Beltsville Agricultural Research Center scientist demonstrated the returns from world-class agricultural science research to the BES students. Described as in-school, science enrichment field trips, these events have proved big hits with BES schools administrators, teachers, and especially enthusiastic youngsters, who are just awakening to the meaning of science in their lives.

FAR-B's enrichment programs at BES for 2005 and 2006 received Volunteer Service awards from the President's Council on Service and Civic Participation. Those successes trace to the thoughtful enterprise of BES Principal Steven Beegle, teacher-science coordinator Christi Davis

and fellow teachers, and the dedication of former or active scientists and managers of FAR-B and the Beltsville Agricultural Research Center.

This year, scientists presented their version of plant science enrichment adapted to the elementary school level. Every BES student took an hour in the school gymnasium -- rotating on signal at 15 minutes intervals among four plant science stations.

At the "plant basics" station, Freddi Hammerschlag and her team lead lively discussions touching on such topics as plant parts like stems and roots--how plants make their own food. They introduced the topic of plant chemistry, and talked about keeping plants healthy and making them better for you.

Over at the "uses of plants" station, science enrichment veteran Allan Stoner and team use their skills to get students thinking about how important plants are in their lives. Stoner has been to BES so many times that students look forward every year to the return of the kindly bear of a man they have come to know as "Uncle Al, the Kiddies' Pal." "Humans, domestic and wild animals, birds, and insects all depend on plants for an essential part of their diets," Uncle Al explains. He grabs their undivided attention when he tells students that plants are essential because they provide the oxygen they breathe.

At the "plants as food station," Dr. Zinc, decked out in white lab coat, also known as Jim Smith, and team coaxed students into becoming plant food detectives investigating how plants provide the food we eat every day. "Food from plants may contain more, or different, vitamins, minerals, and fiber than foods like meat and milk from animals," Smith tells the students. Most foods from plants are low in fat and calories, according to what the plant food detectives learned from their investigations.

At the "plants and the environment station," Jim Anderson and team

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demonstrated the soil erosion effects of rain by simulating rainstorms produced by students wielding rapidly firing squirt bottles. Students were asked to train their squirt bottles on trays of grass or bare soil. Students learned the devastating effects of erosion and sedimentation as soil-laden water rushes through streams and rivers toward its final destination in the ocean. The team explained the scientific process by which plants collect and store the greenhouse gas carbon dioxide. "Plants help prevent pollution of ground water and the Chesapeake Bay," Anderson says.

BES students are making posters to show what they learned from the Plant Science Enrichment Program. Some 35 posters that have been selected by teachers were displayed at the FAR-B booth at the BARC Public Field Day, on June 2. After the BARC Field Day, the posters will be on display at the Citizens National Bank in the Chestnut Hills Shopping Center.

This now annual FAR-B sponsored program would not have been possible without the tremendous effort of Dianne Odland of the ARS Information Staff.

Jim Butcher, *Educational Outreach Chair*

Successful Combined Federal Campaign

This past year was one of our greatest successes. In the 2006 annual campaign, we raised \$9,545 in pledges from our Beltsville employees. This amount is essentially twice the pledges received in previous years. We sent an announcement to every scientist at BARC. We mailed out over 300 brochures. Our staff personnel also made generous contributions. It is apparent that CFC donors are pleased with the programs funded by FAR-B.

The second piece of good news is that the Local Federal Coordinating Committee for the CFC of the National Capital Area approved our organization to participate in

the 2007 campaign. This is no small accomplishment, since there are literally hundreds of organizations competing for funds.

From a management standpoint, FAR-B is a well run organization. Our overhead is about 3 percent. Some organizations are running overheads as high as 25 percent. Our personnel are all volunteers. We distribute our budget on a monthly basis. Our Officers and Board members are all elected. Our strongest assets are our programs. The outreach, research, and educational programs are outstanding. I attached a signed copy of the President's Volunteer Service Award in our 2007 application, based on our outreach programs.

Phil Kearney, *CFC Chair*

Fellowship Honors John Moseman

Shortly after John Moseman's death, Mrs. Moseman made a \$2,000 contribution to FAR-B. The Board of Directors decided to setup a fellowship honoring John's research in plant breeding. Additional contributions of \$1,200 came from outside donors. FAR-B's contribution of \$800 and \$2,000 from John Hartung at the Fruit Lab.

Dr. Kim Lewers, a plant breeder in the Fruit Lab agreed to lead this fellowship program. Kim circulated an announcement of the fellowship on the E-line at the University of Maryland and received numerous inquiries.

Andrea Luquette, Department of Cell Biology and Genetics, College of Life Sciences was selected for the fellowship. She is working with Kim on field studies to develop disease resistance in strawberries.

Phil Kearney, *CFC Chair*

National Agricultural Research Alliance—Beltsville Alliance Formed

The National Agricultural Research Alliance—Beltsville (NARA—B) was officially launched as a Maryland tax-exempt nonstock corporation at the founders' Charter Meeting, held on March 17, 2007, at Behnke Nurseries in Beltsville.

The founders are: Officers: President: John Peter Thompson, chairman of Behnke Nurseries, Co.; Secretary: Renée M. Winsky, executive director of the Maryland Technology Development Corp.; and Treasurer: Wendi M. Williams, vice president of Old Line Bank.

Board Members include Wanda L. Plummer, director of business development, retention and expansion for the Prince George's County Economic Development Center; and FAR-B Special Advisor, Essex Finney, former BARC director. Other members are Markian Melnyk, Legal Advisor; and Jim Butcher, FAR-B Liaison.

The first emphasis is promoting the FY08 appropriations process. On April 13, the Alliance held a meeting at BARC for Congressional staff officers representing the Maryland delegation. The Beltsville Area Office presented a powerful justification for putting BARC funding on a stronger footing. NARA-B drew heavily on the FAR-B FY08 Congressional Outside Witness Statement for its part of the meeting.

Within coming weeks, NARA-B plans to hold a briefing on Capitol Hill for still more Congressional staffers. President Thompson is working with legislative staffer Jim Wood of Congressman Steny Hoyer's office to organize that meeting.

Other pending actions include: broadening the stakeholder and sponsor base; fleshing out a mission statement and strategic plan; improving and expanding communications; and recruiting staff

support to help implement the ambitious goals that the Alliance has set for itself.

Jim Butcher, *Legislative Liaison and Community Outreach Chair*

Report of the FAR-B Awards/Grants Program

For the second year, The Grants and Awards Program Committee, consisting of Past Presidents Bill Wergin, Phil Kearney, and Ralph Bram, has recommended and the entire FAR-B Board of Directors has approved grants of \$20,000 to BARC for scientific travel. These funds are proportionally allocated to the three institutes according to their approximate numbers of SYs and are administered by the institute chairs.

Some recent examples of scientific travel sponsored by the FAR-B Grants and Awards Program included: (1) Dr. Cathy Aime traveled to Uganda and Benin to establish contacts with scientists at the University of Benin, the University of Ibadan, and Makerere University and to lecture in areas of mycology and to present a Plenary Session paper to the First African Conference on Edible and Medicinal Mushrooms; (2) Dr. Bill Tureck traveled to Quebec City, Canada, to participate in the annual American Phytopathological Society meeting and present posters and a scientific paper on *Statistical methodologies for Early Detection Surveys in Forest and Ornamental Landscapes*; (3) Dr. Leslie Wanner attended the 11th International Conference on Plant Pathogenic Bacteria in Edinburgh, Scotland, and spoke on the topic of taxonomy and characteristics of gram-positive plant pathogenic *Streptomyces* species; (4) Dr. Joe Kirkbride traveled to Belgium, France, and Italy to visit four botanical institutions to study critical type specimens of the *Lotus* subgenus *Pedrosia*; and (5) Dr. Don Weber traveled to the Oak Lake Field Station near Brookings, South Dakota, as

an instructor in a short course on the natural history and taxonomy of ground beetles that resulted in cooperative research with several scientific colleagues.

In addition, the following scientists from the Animal and Natural Resources Institute also received grants: Dr. John McMurty, Dr. Julie Long, Dr. Mark Jenkins, and Dr. Lou Gasbarre.

Thanks to FAR-B members for your continued support of this program--particularly during these times of severe budgetary constraint. Each of the recipient scientists expressed sincere appreciation for the opportunity to expand their scientific interactions with colleagues from other institutions.

Due to budgetary considerations, the FAR-B Innovative Idea Award program was suspended during the past year but will be resumed when adequate funding becomes available.

Ralph Bram, *Grants and Awards Chair*

Financial Report

FAR-B's financial condition remains sound in 2007 even with income lagging behind expenditures by several thousand dollars. This deficit was the result of the Board of Directors' decision to dip into reserve funds to provide \$20,000 to BARC scientists for travel grants again this fiscal year.

On the income side of the 2007 budget, we received a 69 percent increase in pledges to the Combined Federal Campaign last fall.

Vernon Pursel, *Treasurer*

IN MEMORIAM

Joel Bitman

Long time member of FAR-B, Joel Bitman, a physiological chemist with the U.S. Department of Agriculture who became a prolific artist after he retired, died of kidney failure on March 6 at Brooke Grove Rehabilitation and Nursing Center in Sandy Spring. He was 80.

Dr. Bitman, who began working at the Agricultural Research Center in 1951, conducted research into DDT and other pesticides, estrogens, cholesterol, cow's milk, polyunsaturated fats, breast milk and mastitis, or inflammation of the breast. He reported his research in more than 400 publications.

In the late 1960s, alarm spread that DDT, which had been developed to combat mosquitoes spreading malaria, typhus and other insect-borne human diseases, was harming the wild bird population.

Dr. Bitman and his colleagues at the USDA initially concluded from feeding experiments on Japanese quails that the pesticide contributed to the thinning of eggshells. His 1969 article on the subject in *Nature* magazine helped fuel the debate over DDT and eggshell thinning. His findings, which were met by criticism, resulted in subsequent experiments in which Dr. Bitman showed that when the quails were fed DDT along with normal amounts of calcium, the shells did not thin.

Later, Dr. Bitman testified before Congress as an expert witness on eggshell thinning and at the proceedings that resulted in banning the pesticide.

Additionally, Dr. Bitman, who was an adjunct professor at Georgetown University Medical School in the 1980s and 1990s, contributed to the understanding of human milk's composition and fat content and how to optimally preserve its beneficial components. His work help clarify the impact that disease and premature birth

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have on human lactation and milk composition.

In 1984, he explained a USDA study that found that mothers of premature babies produce a special milk that helps develop their preemies' brains and nervous systems better than milk from women with full-term infants.

"Mr. Bitman said the studies indicated it was important for the premature infant to receive its own mother's milk, rather than milk collected from other nursing mothers," the *New York Times* reported. He also stressed the importance of properly handling and storing the milk to preserve its special qualities.

As chief of the hormone physiology and biochemistry laboratories in Beltsville, Dr. Bitman supervised research projects in Israel, Poland, Yugoslavia, Pakistan and India. He spent 45 years at the USDA--where he was known for his good humor, no-nonsense approach to problem-solving and mentoring of younger scientists--before retiring in 1995.

Dr. Bitman, a native of Newark, graduated from high school and joined the Navy during World War II. Afterward, he received a bachelor's degree in chemistry from Cornell University and continued his education at the University of Minnesota, obtaining a master's degree in 1948 and a PhD in 1950--both in physiological chemistry with a specialty in steroids.

In the 1950s, Dr. Bitman also began his formal art education, studying oils with Jozef Pielage and oils and acrylics with Jack Perlmutter. More recently, he studied water media painting with Yolanda Frederikse, Susan Murphy and Michael Harrington.

After leaving the USDA, Dr. Bitman's passion turned to painting. He produced about 900 works, featuring many iconic scenes, including the Smithsonian Castle, the Library of Congress, the Old Executive Office Building, the Vietnam Veterans Memorial, the Renwick Gallery, the Pension Building, Washington National

Cathedral, cherry blossoms, the Enid A. Haupt Garden, Georgetown, the C&O Canal, Great Falls and the Annapolis Harbor.

Survivors include his wife of 57 years, Doreen Bitman of Silver Spring; three daughters, Judy Pearson of Silver Spring, Laura B. Rinne of Fayetteville, Ark., and Roberta Abel of Basking Ridge, New Jersey; a sister; and seven grandchildren.

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Liaison with BARC:	David Chitwood <i>chitwood@ba.ars.usda.gov</i>



2007 FAR-B Board of Director

Left to Right: Allan Stoner, Vern Pursel, Phil Kearney, Freddi Hammerschlag, Darwin Murrell, Nancy Thrush, Jim Anderson, Hank Becker, Jim Smith, Dave Chitwood, and Jim Butcher. (Missing are William Wergin, Ralph Bram, Diane Odland, Essex Finney, Morton Beroza, and Frank Longen).

To contact the FAR-B Board

email – farbboard@comcast.net
phone – (301) 854-9758
<http://www.ars.usda.gov/ba/far-b>

Beltsville Area

Area Director:	Phyllis Johnson
Associate AD:	Ron Korcak
Nat'l Visitor Center:	Jennifer Woodward-Greene

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*Dedicated to promoting the research and education programs of the
Henry A. Wallace Beltsville Agricultural Research Center, Beltsville, MD*

THE FAR-B NEWS

January 2008

Editor: Hank Becker

President's Message

Dear Friends and Colleagues,

Reading this first of the 2008 Newsletters will clearly show that 2007 was a very active and productive year for FAR-B, especially in outreach and direct support to BARC. However, 2008 may be an even more challenging year for FAR-B because of the very difficult financial environment that the Area faces.

Although many research units have been significantly improved from the redirections and reorganizations carried out at BARC this past year, the federal budget outlook for FY 08 and 09 may negate some of these gains. FAR-B, however, will make every effort to support and assist BARC, with both financial and public communication efforts. Chief among these will be helping the new National Agricultural Research Alliance-Beltsville ("BARC Alliance") to understand the organization, culture and needs of BARC and its employees. This help will assist the Alliance in developing a strategy for gaining support for BARC from state and local government agencies, the private sector, and other stakeholders. FAR-B has the unique ability to be an important resource of information and advice to the Alliance because it can easily call on a large membership that has very many BARC "veterans" with vast experience at BARC.

I want also to take this opportunity to express my deep gratitude to Phyllis Johnson and Ron Korcak who have so capably led BARC through some very

difficult time these past 11 years--a record tenure! Their vision, energy and imaginative efforts have resulted in many important firsts, and their legacy will always be important to BARC. On behalf of FAR-B, I want to wish them both our fondest wishes for every success and happiness as they enter new stages of their great careers. FAR-B could not have had better partners in our shared goal to ensure BARC sustains its scientific preeminence.

Several Board Members have resigned because of other activities and obligations. FAR-B thanks the following members for their service and contributions to FAR-B: Nancy Thrush, Morton Beroza, Jim Smith, Ralph Bram and Bill Wergin. Their contributions and dedication to FAR-B and BARC will be greatly missed.

K. Darwin Murrell, President



FAR-B Poinsettias Plant Sale

In 2007, FAR-B organized two plant (Behnkes mums and poinsettias) sales. Notices were sent out to all FAR-B members and to BARC employees in

August for the mums and both in August and late October for the poinsettias. Pick-up was held in the National Visitor Center. The mums were sold for \$8.00 each and 60 plants were sold. The poinsettias were sold for \$13.00 each and 111 plants were sold.

These sales resulted in \$807 in income to FAR-B. The money collected from the poinsettias has gone into the FAR-B travel fund for BARC scientists.

In 2008, FAR-B hopes to hold its third poinsettia sale and will announce this in August 2008. Notices are going out early so as not to conflict with the Combined Federal Campaign. Many thanks to all of you who supported the plant sale.

Freddi Hammerschlag, *Fundraising Chair*

Area Director's Report

Happy New Year to everyone! This is the time of year when people are usually thinking about "ringing in the new" and "out with the old." Well this is a very timely refrain for the Beltsville Area in 2008. Back in mid-November Dr. Ron Korcak, Associate Area Director, and myself were presented with directed reassignments from our current positions. I was assigned to become the Area Director for the Pacific West Area and Ron was offered the Area Director position in the North Atlantic Area. Both of these Area Director positions had recently become vacated.

Ron has opted to retire from federal service. His last day on the job will be February 15, 2008. We wish him well in his future endeavors.

As of February 17, 2008, Dr. Joe Spence will be the new Area Director for BARC. Joe is currently the Deputy Administrator on the National Program Staff for Nutrition, Food Safety, and Quality. Joe also was the Director of the Beltsville

Human Nutrition Research Center before moving to the National Program Staff. Dr. Tom Sexton, currently the Director of the Animal and Natural Resources Institute in the Beltsville Area, will be the new Associate Area Director.

This is also the time of year when expectations about the new FY09 federal budget mount. The President's budget is released to the public on the first Monday of February. In fact, we just received the final FY08 appropriations for the Beltsville Area. As you might be aware of, there was an across the board reduction of about 0.7 percent for the Agency. This amounts to about \$912,000 for the Beltsville Area. Additionally, the 2008 4.5 percent pay raise will also have to be covered by existing funds. These actions will present management challenges.

Going back to the FY09 budget, the outlook is that we will face some additional budgetary challenges but any specifics are unknown at this point.

Another transition was the retirement of our Deputy Area Director, Mr. Robert Serrano. Bob will be missed but we wish him all the best in his retirement plans. Mr. Archie Tucker, who is currently the Deputy Area Director for the Mid South Area, has started a 2-month detail as the Acting Deputy Area Director for the Beltsville Area. Archie has over 33 years of Federal Service with ARS and has worked as a Biological Laboratory Technician, Area Property Management Officer and Area Administrative Officer. We hope to complete the hiring of a new Deputy Area Director within the next 2 months.

Lastly, both Ron and I would like to express our sincere appreciation to the members of FAR-B and especially the FAR-B Board of Directors for their unfailing support of the Beltsville Area.

Phyllis Johnson, *Director*

CFC Contributions Slow

Contact with our people involved with the Combined Federal Campaign suggests that contributions are very slow this year. They anticipate their planned goal will only reach 56 percent of their original target, which was one of the lowest amounts collected in several years.

FAR-B made a concerted effort to contact as many BARC scientists during the 2007 campaign. Vern Pursel and I mailed out over 300 fliers directly to everyone in our scientific community. Unless there is a late surge of contributions, FAR-B will receive one of the lowest contributions in the past several years. CFC funds play an important role in our annual budget plans. We will need to closely examine each program we anticipated funding in 2008. Our FAR-B members want to thank everyone who pledged funds to our programs.

Phil Kearney, CFC Chair

Financial Report

Once again FAR-B turned to financial reserves this year to cover the Professional Travel Grant of \$20,000 allocated to the three BARC institutes according to their number of SY's. On the income side of the balance sheet, the funds received through CFC contributions in 2007 were \$1,800 above the previous year.

In an effort to help FAR-B remain financially sound, the Board of Directors has voted to increase Personal Membership dues to \$30 and increase Associate Membership dues to \$15. This is the first increase in membership dues since FAR-B was founded in 1985.

Vern Pursel, Treasurer

Community Outreach

FAR-B members, in partnership with BARC scientists, are gearing up for their fifth year of providing a science enrichment program for Beltsville Elementary School (BES). This year's program, "Exploring Environmental Science," will be held April 15 to 17 in the school's gymnasium. All students in grades 1 to 6 will participate.

This program takes a great effort by FAR-B members and by BARC, NAL and ARS Information Staff employee's. In recognition of the hours spent on this project last year, FAR-B received The President's Gold Medal Volunteer Service Award for 2007 presented by the President's Council on Service and Civic Participation. This was the third year in a row that FAR-B has been recognized.

Dianne Odland, Liaison, ARS Information Staff

Membership Update

As several articles in this issue of the newsletter indicate, the need for a strong Friends group to support BARC, and its employees and programs has never been greater. FAR-B currently has 174 members, including 20 Patrons, 78 Personal members and 76 Associate members. To maintain and hopefully increase our membership, we regularly attempt to contact retirees and former and current BARC employees to urge them to join our group. However, our efforts are often hampered by the lack of names and/or contact information of many past BARC employees, and the apathy of others.

Thus, we would welcome the help of everyone who reads this newsletter in getting the word out to former colleagues -- or other interested parties that you have contact with -- about FAR-B's activities and encourage them to become members. The Membership Directory that

we published in January 2007 is still reasonably accurate, but if you wish to get in touch with me concerning possible new members, please do so.

Finally, at our January Board of Directors meeting we voted to increase the annual cost of Personal membership to \$30 (still less than the cost of a tank of gas) and the cost of Associate Membership to \$15. This was the first increase in FAR-B dues since the organization was formed in the early 1980's.

Allan Stoner, *Membership Chair*

National Visitor Center Says Farewell to Jeanette Baylor

Jeanette Baylor, Information Specialist, retired on January 3, 2008 after 37 years of Federal service, 26 years of which was with ARS. Her last day was December 14, 2007.

Jeanette began her Federal career in 1961, and she came to the Beltsville Agricultural Research Center in 1982 to work for BARC, which became the ARS National Visitor Center (NVC) in 1986. Two years later, the NVC was relocated to its present home in the Log Lodge. Jeanette began coordinating programs for domestic and international visitors in 1997.

Jeanette will be moving in January to Owings, Md. where she plans to spend time traveling, writing, volunteering for FAR-B, and eventually starting a part time business.

While we wish her well in this next chapter, she will be greatly missed. In her time at ARS, Jeanette has created a wonderful foundation and example on which to continue and grow ARS visitor programs.

Jennifer Woodward-Greene,
Director National Visitors Center

Security Services at the National Visitor Center

The National Visitor Center (NVC) staff can no longer provide routine security services for BARC due to staff reductions over the past year. The NVC staff struggled to maintain this service as long as possible. After several weeks of closure this winter due to staffing issues, NVC Director Jennifer Woodward-Greene and BARC Security Officer Dan Thessen developed a plan to reliably cover security for the East side.

As of Jan. 2, BARC Security Services took over the security duties at the NVC. Denise Brome, security contractor, is performing this function at the NVC, which includes checking in routine visitors, and dealing with delivery and service personnel. If Denise is absent, the contractor will have a replacement for her automatically. Denise continues her prior responsibilities for issuing parking permits and clearance for foreign visitors.

This arrangement allows the NVC staff to focus on visitor program development, and enables the National Visitor Center to remain open to the public for regular hours--8:30 am to 4:00 pm.

Jennifer Woodward-Greene,
Director National Visitors Center

IN MEMORIAM

William A. Bruce

Bill Bruce passed away on Wednesday, March 7, 2007 in Columbia, Md. He was 65. Bill was born in Burlington, Vt. and attended undergraduate school at St. Lawrence University in NY. He received his Masters and Ph.D. degrees from The Ohio State University.

After a short post-doctoral period at the University of Florida, he was hired as a Research Acarologist by the USDA. He worked for several years at the Stored

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Products Insects Laboratory in Savannah, Ga. In 1989, Bill moved to Maryland where he worked for several years at the BARC in the Bee Research Lab. His tireless work ethic provided him with much expertise in rearing and studying many species of mites that are economically important to agriculture. He was well-known and respected internationally in his field. He retired in June 1997 after 26 years of service.

Robert Franklin Whitcomb

Robert Franklin Whitcomb, 75, a research entomologist at BARC, identified more than 50 new species of leafhoppers and about 60 new species of microorganisms, died of brain cancer Dec. 21 in Sierra Vista, Ariz. He lived in Sonoita, Ariz.

Dr. Whitcomb was known worldwide for his 1972 discovery of the genus *Spiroplasma* -- a group of small bacteria without cell walls. *Spiroplasma* may be the largest genus of any kind on earth and may contain more than a million species. He worked on these microorganisms for the rest of his career.

He also was deeply interested in birds, and one of his articles, which applied the ideas of island biogeography to mainland bird populations in the eastern deciduous forest, was considered a landmark study. It led to the current emphasis on the negative effects of forest fragmentation on biota -- all living organisms of the forest.

At BARC, Dr. Whitcomb was widely credited with the successful re-creation of its grasslands, a unique landscape in the Washington area that contains the progeny of plants seeded in Colonial times or before.

Born in New York City, Dr. Whitcomb graduated from Blackburn College in Carlinville, Ill., and received a master's degree in entomology in 1958 and a doctorate in plant pathology in 1961--both from the University of Illinois. He did postdoctoral work in entomology at the

University of California at Berkeley for five years. He moved to the Washington area in 1966 to work at Beltsville, where he remained for the next 30 years.

He was an original member of the International Organization for Mycoplasma in 1974 and taught one of its methods courses in Bordeaux, France, in 1984. He published more than 300 scientific papers and in 1979 was one of four editors of a new series of scientific reference books, *The Mycoplasmas*.

Alice Fulton Skelsey

Alice Fulton Skelsey, 81, an author of seven books and a USDA official, died of respiratory failure Nov. 13 at her home in Annandale.

Mrs. Skelsey's first work, *The Working Mother's Guide to Her Home, Her Family and Herself* (1970) advised back-to-the-office mothers not to wait to be asked to help at school, but to be honest about what they couldn't do.

She worked for the USDA for 35 years -- as a magazine and feature writer for ARS, then as director of information for BARC and in 1978 as director of information for Science and Education at USDA.

She was a speechwriter for Cabinet-level officers and worked on Lady Bird Johnson's beautification efforts in the 1960s. Mrs. Skelsey also organized special events for Nancy Reagan at the National Arboretum and worked in Russia and China on projects with the U.S. Agency for International Development.

Mrs. Skelsey retired from the government in 1982 to form an editorial consulting business that specialized in international development in food, agriculture and economic cooperation.

Born Alice Catherine Fulton in Tulsa, Okla., she attended the University of Tulsa and graduated from the University of Colorado. She moved to New York City in the late 1940s to work as a magazine

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writer and joined the USDA in 1950 as a radio and TV specialist for its information office. She appeared on WRC-TV (Channel 4) hosting a 13-week Saturday morning show for teenagers.

Bob Stewart

Dr. Robert N. Stewart who was research geneticist at the BARC died on August 28 at his Beltsville home of 57 years.

In the 1950s, Dr. Stewart became enamored with the prospect of improving poinsettias. He looked for ways to extend what he called "keeping quality" -- that is, lengthening the time that poinsettias would retain their attractive appearance. Then poinsettia plants were beautiful when they left the greenhouse, but quickly lost their attractiveness in non-greenhouse settings.

Before he was through, Stewart would change the face of an industry forever. He would open the way for a once prohibitively expensive specialty plant to become the Christmas Season occupant of virtually every household, office building, and church in the land. According to a government report, the annual wholesale value of potted poinsettias sold in the United States had grown from \$9 million in 1950 to over \$250 million in 2003.

Dr. Stewart was a sustaining member of FAR-B. He was 90.

Steven C. King

Steven C. King, 85, formerly of Gaithersburg, Md. died on Oct. 26, 2007. He was a personal member of FAR-B.

Dr. King was born on December 12, 1921, graduated from the University of New Hampshire, and received his doctoral degree from Cornell University. Before coming to ARS, he worked for Hubbard Farms in Walpole, NH. At ARS, he was an administrative executive with the USDA for 26 years. He was the Branch Chief for

the Poultry Branch and later he became Assistant Director of Poultry Research under Ralph Hodgson who was the Director for Animal Husbandry. In 1972 King retired from the USDA.

After retiring from the government he started Solar King, an early solar energy company he developed from a project building and designing his own solar heated swimming pool. He later became a realtor in Montgomery County and sold real estate for 14 years until he retired at age 79.

He authored seven books during retirement including *Flying the Hump to China* which recounts his wartime experiences. *Why Are We Here?* explores the philosophy of various religions and science-based theories in answering this question. *Seeds of War* examines the causes of war and our present day world conflicts. His last book *Living with Terrorism* examines the roots of terrorism, the history of Islam, and his hopes that a better understanding of the differences in religions and cultures will help towards world peace.

Dale R. Waldo

Dale R. Waldo, a dairy research scientist at BARC from 1957 until his retirement in 1992, died December 4, 2007 in Chambersburg, Pa. after a long struggle with Alzheimer's disease. Dale was born on September 20, 1929 in Eau Claire, Mich. and is survived by his loving wife of 51 years.

Dale received his undergraduate degree from Michigan State University and his Ph.D. in animal nutrition from Cornell University. Dale's scientific contributions pertained to dietary influences on heifer growth and body composition, nitrogen metabolism, and the formulation and utilization of forage-based diets. Dale was the first scientist to propose the use of kinetic models to describe forage cell wall digestion. This model, published in 1972,

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has received more than 220 publication citations and still continues to be cited more than 35 years later.

As a scientist, Dale was known for meticulously conducting his experiments, taking care to reduce experimental error through a combination of precise measurements, selection of the appropriate quality and quantity of animals, and rigorous statistical methodologies.

John Francis Kucharski

John Francis Kucharski, formerly of Hyattsville, Md., died Wednesday in Scranton, Pa. after a long illness complicated by Agent Orange. He was 63. He was a sustaining member of FAR-B.

John was born in Worcester, Mass. on October 27, 1943. John then went on to graduate from the Brook's Institute of Photography, Santa Barbara, Ca. He enlisted in the United States Air Force and served two tours in Vietnam from 1966 to 1968 as a Combat Photographer. John left the Air Force after returning as a decorated combat Veteran.

John worked for the USDA for 36 years. During that time, John worked throughout the USDA serving in the Animal and Plant Health Inspection Service and as the head of the ARS Information Staff Photography Unit. John spent time on assignments around the world, including extensive periods in Mexico and South America. At the time of his retirement on January 3, 2006, John was the Director of the National Visitor Center in Beltsville, Md., where he worked with members of Senate and Congress and with ambassadors from many nations.

Charles F. Mischke

Charles F. Mischke, 62, a retired USDA plant scientist who contributed to advances in plant science and who later

taught biology at Bowie State University, died Oct. 17.

Dr. Mischke, a resident of Beltsville, began working for USDA's ARS in 1981, specializing in weed science and molecular genetics. His efforts to develop high-performance liquid chromatography technology became a major tool in genetic engineering and contributed to advanced DNA analysis.

In the 1970s, while at the University of Arizona, he did work on plant pathways activated by chemicals used by gardeners and farmers. In 1984, Dr. Mischke was part of a team from the USDA and the National Institutes of Health that demonstrated that electrically charged atoms shuttle in and out of plant cells through tunnel-like structures called "ion channels." Previously unknown in plants, the NIH-USDA discovery was published in the journal *Science*.

Dr. Mischke was born in Dallas and graduated from Grinnell College in Iowa and enlisted in the Army. He served as an instructor at the U.S. Army Infantry School at Fort Benning, Ga., and attended Officer Candidate School. A combat in Vietnam and an adviser to the Vietnamese infantry, he was awarded the Bronze Star.

He next attended graduate school at the University of Arizona, where he received a Ph.D. in genetics in 1975. Early in his career, he held assistant professorships at various universities, including the State University of New York at Geneseo and Ohio Wesleyan University. He received a SUNY research fellowship and a National Science Foundation grant.

Dr. Mischke retired from the USDA in 1998. After rehabilitation from an earlier series of strokes, he returned to teaching in 2001. He remained at Bowie State University until last year. He also often served as a judge at elementary school science fairs in the Beltsville area. Survivors include his wife Sue Mischke, also a USDA scientist, of 34 years, of Beltsville.

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kdmurrell@comcast.net

Treasurer: Vern Pursel
vpursel@comcast.net

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janderso1@mac.com

Special Advisor: Essex Finney
eefinney2@msn.com

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stonerfam@earthlink.net

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pkearney@asrr.arsusda.gov

Legislative Liaison
& Community Outreach: Jim Butcher
jim.hickory@verizon.net

Publicity: Hank Becker
hankbecker3@verizon.net

Fundraising: Freddi Hammerschlag
peachnfrog66@comcast.net

Board Members:

Roger Lawson
uscroger@yahoo.com

Dick Zimmerman
rhz1415@starpower.net

Liaison with ARS Info Staff:
Dianne Odland
dianneodland@ars.usda.gov

Liaison with BARC: David Chitwood
chitwood@ba.ars.usda.gov

To contact the FAR-B Board

email – *farbboard@comcast.net*
phone – (301) 854-9758
<http://www.ars.usda.gov/ba/far-b>

Beltsville Area

Area Director: Phyllis Johnson
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*Dedicated to promoting the research and education programs of the
Henry A. Wallace Beltsville Agricultural Research Center, Beltsville, MD*

THE FAR-B NEWS

June 2008

Editor: Hank Becker

President's Message

Dear Friends and Colleagues,

This will be my last message as President of FAR-B. Next year I will serve as Vice President, and continue on the Executive Board. I am very pleased that Vern Pursel agreed to stand for President and that he was approved enthusiastically at the May 13 Annual Meeting. With Vern's considerable experience as Treasurer, his very active participation in many FAR-B activities (science fairs, membership recruitment, outreach, and advising and promoting the creation of the BARC Alliance), and his gift for organization, he is unusually qualified to be President.

I want to also highlight that Richard Zimmerman was elected to replace Vern as Treasurer, and I will become the new Vice-President, succeeding Bill Wergin. Also at the Annual Meeting, Roger Lawson and Richard Zimmerman were elected to the Executive Board, replacing Bill Wergin, James Smith, Mort Beroza and Ralph Bram--all of whom resigned during the past year. On behalf of FAR-B members, I want to sincerely thank them for their excellent past service on the Board and dedication to FAR-B's mission, and to warmly welcome Roger and Richard.

There are two issues I want to discuss in this final report to the membership. One is the importance of FAR-B's financial reserves to its mission to promote and support BARC. The recent economic downturn appears to have had an impact on one of FAR-B's major sources of income, the Federal Combined Campaign.

It appears that this year's income will be down 20 percent compared to the

previous year. Another important source of funds for FAR-B is membership dues, and although the number of members is reasonably level, the number of members behind in paying their dues is quite large.

The importance of this loss is that it handicaps FAR-B's ability to help BARC and its scientists in such things as travel funds, support to BARC by facilitating visits by important delegations and groups who come to BARC to learn more about its program and achievements, and the contributions FAR-B makes to the purchase of major equipment.

I urge all members to please pay their dues in a timely manner, and to discuss with their colleagues the benefits of joining FAR-B--either as an Associate Member or as a Personal Member. It is worth noting that FAR-B's overhead is 2 to 3 percent, making nearly all of the dues it receives available for redirecting to BARC.

The second topic I want to touch upon is the future directions of BARC, the subject of Area Director Joe Spence's keynote talk at the Annual Meeting. The development of a 21st century BARC will require a certain amount of reinvention and redirection--some of which may be painful and difficult. But Dr. Spence made the case that unless BARC undertakes this proactive evaluation and planning, it will have little recourse but to continue to be buffeted and diminished by external forces and events.

What is FAR-B's role in this? In addition to supporting Dr. Spence and Dr. Tom Sexton, the Associate Area Director, in this undertaking this task and assisting them when called upon, FAR-B can

provide encouragement and advice to the BARC Alliance, which is dedicated to building strong government and private sector support for BARC which could help to level the playing field for BARC in competing for the resources and research recognition its quality of science deserves.

Finally, I want to thank all those who assisted and encouraged me throughout my term as President. It was a rewarding and stimulating experience. I look forward to providing similar support and encouragement to Vern, who will lead us in these truly "challenging times."

Thanks to Jim Plaskowitz, the Beltsville Area Web Page Administrator, FAR-B Website has been updated.

Warm regards,

K. Darwin Murrell, *President*



FAR-B Poinsettias Plant Sale

Poinsettia Plant Sale and Possible Garden Day

FAR-B organized a successful poinsettia sale in Fall 2007, selling 111 plants with profits going to the BARC scientists travel fund. FAR-B plans to hold its third poinsettia sale in late summer/early fall and hopes you will support this effort. Look for the announcements of the sale in the August special mailing.

Also we are considering sponsoring a Garden Day (visiting several gardens in the area for a small fee) in either May or June of 2009. We would very much like your feedback on this: 1) Are you in favor of FAR-B sponsoring a Garden Day as a fundraiser? 2) Would you and/or your family attend a garden day? 3) Would you be willing to help out with Garden Day? 4) Do you have any ideas for other types of fundraisers? Please get back to me,

Freddi Hammerschlag at:
peachnfrog66@comcast.net

Area Director's Report

I am excited to be back at BARC after being on the National Program Staff for over 6 years. I am also pleased to have been joined in the Area Office by Tom Sexton, Associate Area Director, and Lisa Baldus, Deputy Area Director. The three of us have worked together in different capacities over the years and have a thorough knowledge of BARC and have great respect for the incredible research that has been and continues to be conducted here.

Despite the preeminence of BARC research, we face a number of internal and external challenges. ARS has been dealing with flat budgets recently and the prospect of increases in budget in the near future is not great. Our research budgets are under increasing pressure from inflation, rising energy costs, and increases in salaries. The current administration's budget priorities are biofuels and bioproducts, obesity prevention, food safety, colony collapse disorder and specialty crops and these are areas that Beltsville can play a major role. However, rather than new funds, the funding for these new initiatives will come from redirection of ongoing research. In fact, BARC has been targeted with several million dollars in cuts proposed in the next fiscal year. In addition to the budget, we will have to live with uncertainties related to the change in administration following the elections. The recent signing into law of the Farm Bill calls for major reorganizations in the Research, Education, and Economics mission area and it remains to be seen how they will affect ARS.

We have limited or no control of the external uncertainties listed above. Within BARC itself, there is no shortage of challenges. The land holdings of the Center are always going to be a target for development and other uses. The number of buildings is much greater than needed to support our program. We have over 160 building here at BARC on our

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demolition list! The cost of energy continues to be a major factor as is the maintenance of the buildings and infrastructure. In order to reduce indirect research costs, we have started the process to develop a space plan for BARC and to consolidate space wherever possible.

Despite these uncertainties and challenges, I see that we have exceptional opportunities for BARC. We have outstanding scientists and significant resources sufficient to support a solid research program; the program just needs to be more focused. In the coming year, it is my plan to develop a research vision of BARC for the next 10 years to identify research we should pursue at BARC that really is "best in class." Having this vision will guide our decisions about space consolidation, resource allocation, the development of research resources, and the hiring of scientists. One recent benefit for BARC is that the Farm Bill provides BARC with Enhanced Use Lease Authority that will allow us to partner with other entities on BARC property to have more joint research activities and the leveraging of resources.

Having returned to BARC, I have seen changes and opportunities that did not exist before I left in 2002. One of the constants, however, has been the continuing support of FAR-B. This support has been most valuable in helping to keep Beltsville at the forefront of agricultural research and is appreciated by all of the staff here at BARC.

Joseph Spence, Area Director

Combined Federal Campaign

On May 5, 2008, the Local Federal Coordinated Committee for the Combined Federal Campaign of the National Capital Area approved FAR-B's application to participate 2008 campaign. We have a number of assets that makes our

application a winner for the past 5 years. FAR-B has no paid employees. Our overhead is less than 3 percent. Some organizations exceed 25-percent overhead and are subject to an outside audit that can be very expensive. We are an all volunteer organization which communicates primarily via e-mail. FAR-B has elected officers that meet on a monthly basis.

Our donations for the years, 2006 were \$9545.99 and 2007 were \$7,268.64. The decline from 2006 to 2007 reflects the general lull in the national economy.

We are optimistic about a recent approach that involves a personal letter sent to scientists and staff at Beltsville seeking donations. Our committee consists of Jim Anderson, Vern Pursel, and me.

One of the most outstanding activities sponsored by FAR-B has been our Community Outreach program. The educational facet sponsors an excellent program in the Beltsville area. It is one of those achievements that must have played a major role in approving our 2008 application.

Phil Kearney, CFC Chair

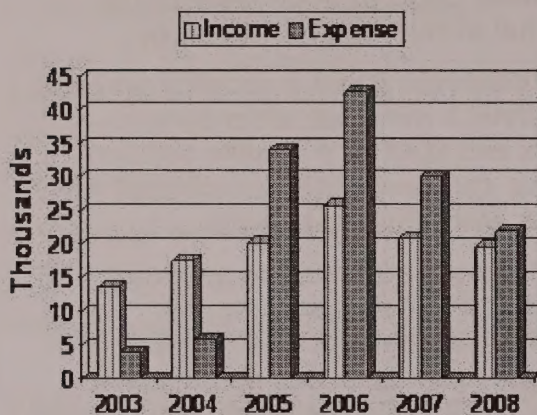
Financial Report

Since this will be my final financial report, I have prepared a graph that shows FAR-B's income and expense history during the period I served as Treasurer. From 2003 to 2006 our income increased by several thousand dollars each year, primarily due to a higher return on our investments. The graph also shows that during the past 3 years our expenditures exceeded income by a total of \$40,000. That was the result of the Board's decision to contribute \$25,000 to the Systematic Entomology Laboratory for the purchase of a computer-controlled remote microscope in 2005, funding of three research grants (\$14,000) in 2006, and

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funding of the Professional Travel Grant Program (\$20,000 each year) in 2006 and 2007. However, the FAR-B Board clearly recognized that expenses can't continue to exceed income year after year. As a consequence, the Professional Travel Grant Program has been reduced to \$10,000 in 2008, and we expect that our budget for this year will come close to being balanced if members continue to pay their dues.

FAR-B's Financial Trends



Vernon Pursel, Treasurer

BARC Poster Day

The 19th Annual BARC Poster Day was held on Wednesday, April 23, 2008, at the National Visitor Center. This is the third year that FAR-B has rented a tent to provide sufficient space so the Students from area high schools who conducted research projects under the mentorship of Beltsville Area scientists could participate along with BARC newest research scientists, visiting scientists, and post-doctoral research associates. FAR-B provided financial support to provide lunch and refreshments for all poster presenters and cash awards to the top three student posters.

First Prize: \$300 Presented to: Chinwe Madubata, Eleanor Roosevelt High School

Mentor: Brian Bowker, Food Safety Laboratory, ANRI

Poster: *Effect of Sarcomere Length on Efficacy of Meat Tenderization Treatments*

Second Prize: \$200 presented to: Renjit Thomas, Eleanor Roosevelt High School

Mentor: Insook Son, Environmental Microbial Safety Laboratory, ANRI

Poster: *Change in the DNA of Escherichia coli in Bulk Tank Milk*

Third Prize: \$100 presented to: Jonathan Brevard, Oxon Hill High School

Mentor: Milutin Djurikovic, Sustainable Agricultural Systems Laboratory, ANRI

Poster: *Nitrous Oxide Emissions in No-Till, Conventional Till, and Organic Farming Systems*



Awardees of the High School Division 2008 BARC Poster Day (l. to r.): Renjit Thomas, Chinwe Madubata, Vern Pursel (FAR-B Representative), and Jonathan Brevard

Community Outreach

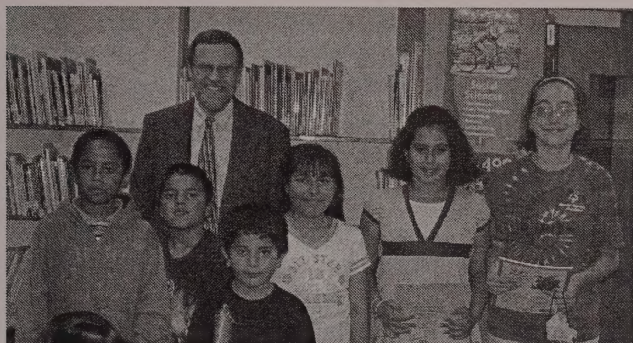
- An Open Letter to FAR-B

Beltsville Elementary School is very privileged to have the FAR-B (among their active group of community school volunteers. This group, composed of both active and retired scientists from USDA, the University of Maryland, and area agencies, spends much time planning and presenting hands-on science lessons for all of our classes in grades one through six in our gym for 3 days each April. They are able to bring their wealth of

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scientific knowledge and experience down to the level of our youngsters with their vibrant, hands-on activities. Over the years, we've had all kinds of live insects, chickens, and other living specimens play a role in these meaningful science lessons.

This year's program focused on Exploring Environmental Science with four stations: Ecology Basics, Waste Generation and Recycling, Plants Have Problems Too, and Good Insects/Bad Insects. What a way to raise awareness for our next generation of citizens!



BARC Area Director Dr. Joseph Spence visits the Beltsville Elementary School where students who were treated to FAR-B's Science Enrichment Program won first prizes for posters at the Poster Awards Ceremony. FAR-B's Science Enrichment Program at BES was awarded two silver prizes and certificates--one for FAR-B another for BARC.

This FAR-B program exemplifies Prince Georges Superintendent of Education Dr. Deasy's belief in the importance of the Community's sharing in the responsibility for successful schools. They bring science to our students from a perspective and expertise level that embellishes and supports the excellent teaching by our school's dedicated teachers. Teachers and students alike look forward to the hands-on workshop each year. Team work with the community does enrich Beltsville!

Stephen Beegle, *Principal Beltsville Elementary*

Some Progress for the Beltsville Alliance

The National Agricultural Research Alliance-Beltsville has vastly grown its reach and impact over these past several months. Here are a few selected accomplishments of Alliance President John Peter Thompson:

September—Arranged an informational BARC and NAL tour for USDA Secretary and Deputy Secretary, Cong. Steny Hoyer, Sen. Ben Cardin, and key Congressional staffers

January—Briefed Sen. Barbara Mikulski and staffers from the offices of Cong. Hoyer and Sen. Cardin, and Sen. Mikulski, and collaborated with offices of Cong. Hoyer and Sen. Mikulski and Sen. Cardin on Congressional letter to the Secretary of Agriculture requesting a forward-looking strategic plan for BARC and NAL

February—Provided comment to Congress on the Office of USDA Secretary's reply to the Congressional letter regarding strategic plan and he testified before Maryland Senate in support of Joint Resolution urging the Governor to support BARC and NAL

March—Testified before Maryland House of Delegates in support of Joint Resolution urging the Governor to support BARC and NAL

March—Presented FAR-B's Testimony to Key Congressional Offices on FY 2009 Funding of BARC Research

June—Meet with ARS Administrator Ed Knipling in preparation for discussions with Under Secretary Buchanan to follow up on congressional letter and to discuss long-term vision for BARC and NAL

On going—Outreach to widen Congressional Support and generate stakeholder communications in other Districts and States of Representatives or Senators who have previously supported BARC. (Alliance Board Member and Treasurer Wendi Williams will lead this new Alliance undertaking.)

IN MEMORIAM

Dr. Jan van Schilfgaarde

Dr. Jan van Schilfgaarde, retired ARS Area Director for the Pacific West Area, passed away March 25, 2008. Dr. van Schilfgaarde was recognized nationally and internationally for his many contributions to agricultural drainage concepts, theory, and design.

Jan was born in The Hague, Netherlands, the oldest of six children, on February 7, 1929. In 1946, after completing secondary school, he came to the US to study on a scholarship at Hope College in Holland, Mich. Following this, rather than returning to The Netherlands, he continued his study at Iowa State College at Ames, Ia. In 1951, Jan married Roberta Hansen.

From 1954 to 1964, he taught agricultural engineering at North Carolina State University at Raleigh, rapidly advancing from Assistant, to Associate, and then Full Professor. In July 1964, he joined the staff of ARS. Jan remained with ARS until his retirement in 1997, over the years holding a wide variety of leadership positions.

From 1964 to 1972, he was at Beltsville, headquarters of the Soil and Water Conservation Research Division, first as Chief Water Management Engineer, and later as Associate Director and Director. From 1972 to 1984, Jan was Director of the U.S. Salinity Laboratory at Riverside, Calif. Next, he moved to Fort Collins, Colo. where he served as Area Director of the Mountain States Area and as Associate Area Director of the Northern Plains Area. In 1991, he returned to Beltsville as Associate Deputy Administrator for Natural Resources and Systems. In 1996 he moved to the West again and completed his career at Albany, Calif. as Area Director of the Pacific West Area in November 1997.

Lloyd C. Cochran

Dr. Lloyd C. Cochran died Monday, Feb. 4, 2008 at the age of 101.

He was born April 5, 1906 at Frankfort, Ind., son of Bertha E. and Morris E. Cochran. Lloyd attended a country one-room grade school and graduated from Rossville, Ind., High School. He received a BSA degree from Purdue University and M.S. and Ph.D. degrees in plant pathology from Michigan State University.

In 1933 he married Maud V. Tague and in 1936 moved to Riverside, Calif., where he joined the Citrus Experimental Station of the University of California. For the next 21 years, he did research on virus diseases of citrus and deciduous fruit and nut trees for the university and USDA.

In 1957 they moved to Orlando, Fla., where Lloyd became Director of Citrus Production Research for USDA. In 1959 they moved to Beltsville, Md., where Lloyd became Chief of Fruit and Tree Nut Crops Research for USDA.

Lloyd retired in 1969 and they moved to Corvallis where he joined the botany department of Oregon State University to work on rose diseases. After retirement from Oregon State University in 1973, Lloyd took several consulting jobs which included 3 years in Iran and shorter terms in Pakistan, Kenya and The Philippines.

Lloyd helped found several International Fruit Tree Research Groups, including The European Fruit Tree Virus and the International Citrus Virus Congresses. He traveled widely to meetings and fruit growing areas in many countries.

Jack R. Coulson

Jack Richard Coulson, 75, of Bluemont, Va. died Saturday, Jan. 13, 2007, in Blue Ridge Hospice Residential Center, Winchester, Va.

He was born Jan. 31, 1931, in Manhattan, Kas., the son of Emery Jack Coulson and Esther Marie George Coulson. Jack earned a B.A. in zoology from Iowa State

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University and a M.S. in entomology from the University of Maryland. He served as a Marine Sergeant from 1952 to 1956.

He had a distinguished career spanning nearly 40 years with ARS. Throughout his career he provided critical support to scientists who were importing exotic biological control agents to control exotic pests. His service to the field of biological pest control, in the US and many other parts of the world, was recognized by his election to president of the International Organization of Biological Control.

At the time of his retirement, he was in charge of the Biological Control Documentation Center (BCDC). The BCDC maintains the Release of Beneficial Organisms (ROBO) database, and has extensive files of correspondence, published and unpublished reports, and reprints concerning biological control research and related activities, primarily involving USDA activities, but also including many records from other involved organizations, dating back to the 1930s or before. Also, the BCDC maintains a rather extensive library of journals and books relating to biological control, Integrated Pest Management and taxonomy related to biological control activities. Scientists from the USDA and other U.S. scientific institutions, and foreign scientists and the general interested public utilize these unique resources. Thus, BCDC continues to serve all of those interested in biological control.

Alfred H. Baumhover

Alfred Henry Baumhover, 85, who was known within Carrboro's Webbwood community as "Sir Alfred" because he was knighted by Queen Juliana of the Netherlands in 1955, died Feb. 21, 2007 in Carrboro, N.C.

Baumhover was born on June 12, 1921, and raised on the family farm in Carroll, Ia. At the age of 16, he assumed the responsibility of running the farm after his father suffered an accident. Baumhover

pursued his education and received his BS from Iowa State College in 1949.

Upon graduation, Baumhover went to work for USDA. He spent 2 years as the area supervisor of the USDA Grasshopper Control Division in Great Falls, Mont. In 1951, his position was abolished due to the commercial availability of insecticides for grasshoppers. Baumhover chose to join Raymond C. Bushland and work on farm pests at the Kerrville, Tx. laboratory.

Baumhover arrived when the finishing touches were being completed on Edward Fred Knipling's Sterilized Insect Technique (SIT)--an autocidal theory of total insect population management, to be tested on the screwworm -- a notorious flesh-eating parasite of warm blooded mammals. Baumhover became the lead field agent for the experimental efforts to control the screwworm. His base of operations was transferred from Texas to Florida. From there, he worked on the Sanibel Island, Fla. tests and was selected to lead the landmark Curacao, Netherlands Antilles, Experiment in 1954, which proved the efficacy of SIT. For his part in the eradication of screwworms on Curacao, Baumhover was conferred knighthood in the Order of Orange-Nassau.

After Curacao, Baumhover returned to Florida to participate in the successful screwworm eradication efforts there and across the US Southeast. By 1959, screwworms had been eradicated from that region. He then went to Texas to participate in the even more daunting anti-screwworm campaign in the US Southwest. Even though the Southwest was declared screwworm free in 1966, it was not until 1982 that eradication truly occurred. In 1964, Baumhover accepted a position with the USDA's Tobacco Insects Investigations and continued there until his retirement to Minnesota on February 4, 1984. Throughout his tenure with the Tobacco Insects Investigations, Baumhover continued to serve as a consultant for the screwworm eradication campaign.

Friends of Agricultural Research-Beltsville, Inc.

Board of Directors

President: Vern Pursel
vpursel@comcast.net

Vice President: K. Darwin Murrell
kdmurrell@comcast.net

Treasurer: Dick Zimmerman
rhz1415@starpower.net

Secretary: Jim Anderson
janderso1@mac.com

Special Advisor: Essex Finney
eefinney2@msn.com

Membership: Allan Stoner
stonerfam@earthlink.net

CFC: Phil Kearney
pkearney@asrr.arsusda.gov

BARC Alliance Liaison
& Community Outreach: Jim Butcher
jim.hickory@verizon.net

Publicity: Hank Becker
hankbecker3@verizon.net

Fundraising: Freddi Hammerschlag
peachnfrog66@comcast.net

BARC Centennial: Roger Lawson
rlawson66@comcast.net

Liaison with ARS Info Staff:
Dianne Odland
dianneodland@ars.usda.gov

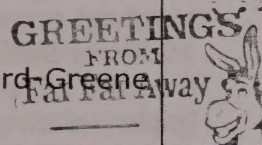
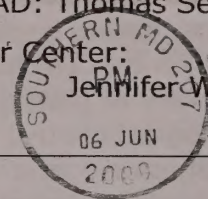
Liaison with BARC: David Chitwood
chitwood@ba.ars.usda.gov

To contact the FAR-B Board

email – *farbboard@comcast.net*
phone – (301) 854-9758
<http://www.ars.usda.gov/ba/far-b>

Beltsville Area

Area Director: Joseph Spence
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PO Box 1061
Beltsville, MD 20705-1061



Dr. Essex E. Finney, Jr.
11206 Chantilly Lane
Mitchellville, MD 20721

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THE FAR-B NEWS

January 2009

Editor: Hank Becker

President's Message

Dear Friends and Colleagues,

I hope this newsletter finds you well, warm, eager to face the New Year. I want to begin by providing an update on some recent activities the FAR-B Board has undertaken since Darwin "snookered" me into agreeing to accept candidacy for this office.

First of all, FAR-B has a new web page <http://www.far-b.org> that provides several advantages over the one previously found on the BARC home page. When you take a few minutes to check it out, you will find that it now provides the opportunity to pay your dues on line with a credit card. This capability will assist FAR-B considerably in the months ahead to collect registration fees for workshops, conferences and symposia that BARC scientists periodically host, and to receive payments for any FAR-B fundraising event, such as the BARC poinsettia sale.

The new web page also has a section devoted to Donations and Bequests. There you will find information on how FAR-B members and others can make tax-deductible donations to FAR-B, or alternatively, establish a "Donor Advised Fund" to make bequests or tax-deductible donations to a specific research activity at BARC. If you don't have access to the internet, please let me know and I will mail this information to you.

I want to also highlight FAR-B's major community outreach activity of 2008 that resulted in FAR-B receiving our fourth **President's Volunteer Service Award**. This was our second Gold Medal Award presented by the President's Council on Service and Civic Participation in recognition

of FAR-B's three-day Science Enrichment Program - *Exploring Environmental Science*, which was presented to all students of the Beltsville Elementary School. This huge effort was lead once again by Dianne Odland with assistance of FAR-B members, and BARC, NAL, and ARS Information Staff employee volunteers.

Another major FAR-B activity was the funding of seven travel grants to BARC scientists that permitted them to present their research at national or international scientific meetings. These grants provided funding for travel that budget constraints in their laboratory would not have permitted.



The Take Your Child to Work Day program was held for all children between the ages of 6 through 15 for BARC employees. The program included the showing of "Einstein Alive! The Science Show"--an Interactive Exchange Room, with lunch provided by FAR-B for the participants.

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Other FAR-B sponsored or cosponsored activities for BARC employees included: the BARC Poster Day competition for Student Interns from Eleanor Roosevelt High School and several other high schools in Prince George's County; three Distinguished Lecture presentations to BARC employees; the *Take Your Child to Work Day Program*; the *Administrative Professional's Day Training Program*; the *Leaders of Tomorrow – End of Summer Student Hire Program*; hosting of the Meyerhoff Scholars Summer Bridge Program; and the Hispanic Heritage Month -Special Emphasis Program.

From its beginning, one of FAR-B's most important functions has been to assist BARC scientists in hosting various research symposia, workshops and conferences. During this past year FAR-B assisted BARC scientists in hosting of two North Central Regional Committee meetings, one North Eastern Regional Committee meeting, and a national conference - *The Future of Dairy Cattle Genetics Research*. The latter was organized by the Animal Improvement Programs Laboratory to celebrate the 100th year of the dairy cattle improvement program in the USDA.

One of the tasks we have ahead this coming year is to assist in the planning and securing funds for BARC's Centennial celebration in 2010. Roger Lawson is FAR-B's representative on the BARC Centennial Planning Committee, and as plans are firmed up, we will attempt to keep you informed via <http://www.far-b.org> and *The FAR-B News* of the various events that are scheduled so you might attend one or more of these BARC Centennial events.

Warm regards,

Vern Pursel, President

Area Director's Report

It has been just one year ago that I was appointed Director of the Beltsville Area. During the year, I have greatly appreciated the support and efforts of FAR-B. It has been an exciting and interesting year and no

doubt the coming year will bring lots of challenges and opportunities.

Change seems to be a word that is heard a lot in Washington these days. We have a new President, a new administration and a new Secretary of Agriculture. Additional political appointees, including a new Undersecretary for REE (also now designated as the Department's Chief Scientist) will no doubt be named shortly. The recently enacted Farm Bill calls for a significant level of new planning to take place across a number of REE agencies, including ARS. While some of these changes were predictable, others were not. Who would have predicted the rapid deterioration in the banking industry and the resulting financial slowdown? The price of energy and food has seen wide and often unexplainable swings up and down.

No one knows where things will ultimately end up; uncertainty is a word that often accompanies change. There are things, however, that we do know for certain. As long as people require food, agriculture will remain important for the American people. Increased production is needed to feed a growing world population. We know that we need to protect our food supply from threats naturally occurring and intentional. Protection of our environment and effective stewardship and management of our resources will always be a need. We will need to ensure that our food is nutritious and promotes health. We will need to develop alternative uses for agricultural products to ensure competitiveness for American producers in an increasingly competitive global economy. All of these needs are reflected in the research activities conducted within the Beltsville Area. For that reason, I feel that the Beltsville Area has a unique and crucial role to play in ensuring that we as a nation maintain a viable and healthy agricultural enterprise.

Over the past year, Tom Sexton and I have been meeting with each of the laboratories within the Beltsville Area. This has been one of the highlights of the past year for both of us. This has allowed us to not only get to meet many employees that we had

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not had the opportunity to meet previously, but we have been able to see first-hand the incredible research that is being conducted throughout the Area. To say we have been impressed would be an understatement. Scientists in the Beltsville Area have a long history of research innovation and great impact. As we move forward in these times of change, I am convinced that the research being conducted at Beltsville today will add to that legacy and meet the challenges that face American agriculture.

Joseph Spence, *Area Director*

Membership Update

FAR-B's membership is currently approximately 175. As you would expect, there are continually some new members and some who don't pay their dues, but the number remains rather constant. Membership includes about 25 Patrons, 75 Personal members and 75 Associate members. In order to maintain and hopefully increase our membership, we regularly attempt to contact retirees and former and current BARC employees to urge them to join our ranks. Recently, we have also been making a concerted effort to recruit Sustaining members by contacting specific individuals associated with companies and organizations that BARC scientists are currently working with. It remains to be seen whether this effort will pay off.

Our efforts to recruit new members are often hampered by the lack of names and/or contact information of many past BARC employees and the apathy of others. Thus, we would welcome the help of all of you who read this newsletter in getting the word out to former colleagues, or other interested parties that you have contact with, about FAR-B's activities and encourage them to become members, if they do not already belong. If you wish to pass along to me names and addresses of possible new members, please do so and I will send them a FAR-B brochure and an invitation to join.

Finally, one of the benefits of FAR-B membership has always been a complimentary subscription to the *ARS Agricultural Research* magazine that is published monthly. However, I know that some of our members are not receiving this publication. If you are not receiving the magazine, and would like to do so, please contact me and I will try to get this corrected. My e-mail address is stonerae@hughes.net or you can send a note to the FAR-B P.O. Box.

Allan Stoner, *Membership Chair*

Combined Federal Campaign

On May 5, 2008, the Local Federal Coordinated Committee for the Combined Federal Campaign of the National Capital Area approved FAR-B's application to participate in the 2008 campaign. We have a number of assets that makes our application a winner for the past five years.

FAR-B has no paid employees. Our overhead is less than 3 percent. Some organizations exceed 25 percent overhead and are subject to an outside audit that can be very expensive. We are an all volunteer organization which communicates primarily via e-mail. FAR-B has elected officers that meet on a monthly basis.

Our major problem has been a decline in contributions since the general lull in the national economy.

We are optimistic about a recent approach that involves a personal letter to scientists and staff at Beltsville seeking donations. Our committee consists of Phil Kearney, Jim Anderson, Vern Pursel and Jim Smith.

One of the most outstanding activities sponsored by FAR-B has been our Community Outreach program. The educational facet sponsors an excellent program in the Beltsville area. It is one of those achievements that must play a major role in approving our 2009 application. Our application for the 2009 CFC has been sent. New regulations have been implemented by

OPM for the 2009 approval process, which will involve the IRS.

Phil Kearney, *CFC Chair*

Community Outreach

FAR-B and BARC scientists are joining forces for the 6th consecutive year to sponsor an all-school science enrichment program for Beltsville Elementary School. This year's program, *Chemistry in Everyday Life*, will be held from April 28 to 30 in the school's gymnasium. Four hands-on learning stations will be featured: Insect Chemistry, Food Chemistry, Chemistry and the Environment, and Power Plants (biofuels).

For several years now, this program has been honored to receive a President's Volunteer Service Award, an initiative of the President's Council on Service and Civic Participation. Both the school and FAR-B take great pride in the program. The students and teachers look forward to it each year.

Dianne Odland, *Liaison with ARS Info Staff*

BARC PLANS NOW FOR ITS CENTENNIAL IN 2010

In 2010, BARC will celebrate 100 years of research accomplishments. The centennial year will include a series of events documenting the many contributions in plant and animal research that have made BARC an institution recognized worldwide.

Celebration plans include an event early in the year that documents the historical contributions that have made BARC a premier research facility. The speakers' committee has recommended several programs that focus on current and future research. There will be several events on selected topics consistent with the new priorities of BARC research with keynote speakers.

Presentations by keynote speakers will be followed by mini-symposia. These programs will describe the integration of current

programs and explain the innovative research plans for each major topic. A schedule of programs will be included on the centennial website.

Centennial events are intended to attract both scientists and the general public. The BARC centennial year provides an educational opportunity with emphasis on research designed to ensure a safe and abundant food supply for the 21st Century.

Kim Lewers has overall responsibility for the total program. Members of the committee include Amy Rossman, Rose Hammond, Beverly Clevidence, Joan Lunney, Lew Ziska, and Jennifer Woodward-Greene. FAR-B's BARC Centennial Chair Roger Lawson chairs the speakers' committee. A centennial website is planned. A program will probably be presented about every few months. Much of these plans are tentative, awaiting final approval by BARC Area Director Joe Spence.

Roger Lawson, *BARC Centennial Planning Committee*

IN MEMORIAM

Harold Lindsay Barrows

Harold Lindsay Barrows, of Chattanooga, died on Thursday, October 30, 2008, at his home at The Terrace of Mountain Creek.

He was born on Lookout Mountain, Tenn., on December 14, 1926, where he was enjoying retirement until his health declined.

He was preceded in death by his wife, Betty Callaway Barrows. He is survived by his son, Thomas Barrows of Dover, Del.

Harold was a veteran of WWII, having served as a sergeant in the U.S. Army. He received his BS degree in Chemistry from the University of Chattanooga and his MA in Analytical Chemistry and his PhD in Soil Chemistry from the University of Florida.

He served 38 years with the U.S. Department of Agriculture. At BARC, his positions included Head of the Analytical Chemical Laboratory; Research Leader for the Soil Pollution Research Program; Assistant to the Director at the U.S. Soils

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Laboratory; and Chief of the Northeast Branch-Soil and Water Conservation Research Division. He also served as Deputy Assistant Administrator of the Agriculture Research Service in Washington, DC and Chief of the Soil, Water and Air Sciences Program, Washington, DC.

As a member of the Administrator's Council, he served as the U.S. Leader for the US-USSR exchange for agricultural research and as chief negotiator in the field of soil science. He served as the soil science coordinator and negotiator for a similar program with the People's Republic of China.

Later in his career, he served as the Director of the National Soil Erosion Research Laboratory in West Lafayette, Ind. He was adjunct Professor of Agronomy at Purdue University and was named Professor Emeritus of Agronomy at Purdue University upon his retirement.

He was a charter member of the Senior Executive Service of the Federal Government. He was elected a Fellow in The American Society of Agronomy, The Soil Science Society of America and The Soil and Water Conservation Society.

Marc Cathey (Henry Marcellus Cathey)

H. Marc Cathey, 79, former director of the U.S. National Arboretum and a flamboyant promoter of gardening everywhere, died Oct. 8 at a nursing home in his home town of Davidson, N.C. He had Parkinson's disease.

Dr. Cathey gave hundreds of lectures during his career that combined scientific authority with sheer showmanship.

Before the dawn of PowerPoint, he would extol the virtues of plants using multiple slide projectors, soundtracks and, on occasion, smoke machines, confetti and other special effects.

Dr. Cathey was the National Arboretum director from 1981 to 1991, a time of growth at the botanical garden and research facility in Northeast Washington.

He oversaw the expansion of the National Bonsai and Penjing Museum; the creation of the National Capitol Columns garden; and the New American Garden, a demonstration garden of perennials and grasses designed by landscape architects Oehme, van Sweden and Associates at Dr. Cathey's bidding.

His tenure also marked a period when gardening was undergoing a dynamic shift toward a more natural style, and Dr. Cathey became a leading voice in the movement toward greater use of perennials and ornamental grasses.

He coined the phrase "tough plants for tough times" to convey the need for lower-maintenance landscapes that were kinder to the environment than the former lawn- and chemical-dominated model.

After leaving the Arboretum, he was president of the Alexandria-based American Horticultural Society from 1993 to 1997. He retired as the society's president emeritus in 2005, when he and his wife, Mary, returned to North Carolina from Silver Spring.

Besides his wife of 50 years, Dr. Cathey is survived by two children, Marcy E. Cathey of Bowie and Henry M. Cathey Jr. of Chincoteague, Va.; and four granddaughters.

In spite of five decades living and working in the Washington area, Dr. Cathey never lost his lilting Tarheel voice, which became familiar to countless radio listeners over the years.

He had a weekend radio show on WWRC-AM for more than a decade until 1994 and later became a regular guest on public radio locally. He also appeared on NBC's "Today" show and ABC's "Good Morning America."

As a teenager, Dr. Cathey was also interesting in painting, and he enrolled in Davidson College, a liberal arts college, but transferred to North Carolina State University to study the commercial greenhouse cultivation of flowers.

He received master's and doctorate degrees in horticulture at Cornell University. As a Fulbright scholar, he traveled to the

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Netherlands for a year and studied at the agricultural university in Wageningen.

In 1956, he came to work for the Agricultural Research Service in Beltsville and participated in groundbreaking research on the effect of light on plant growth and flowering.

Recognizing that weather and climate patterns were changing and affecting gardening practices, he directed the redrawing of the Agriculture Department's plant hardiness zone map during his tenure at the ARS Arboretum. The map is used to determine which plants will survive in various regions of the country.

He also saw a need to track not only winter low temperatures' effects on plants, but also those of summer heat. He created a heat zone map and co-wrote the book *Heat Zone Gardening: How To Choose Plants That Thrive in Your Region's Warmest Weather* (1998).

Dr. Cathey had wide cultural interests besides gardening and art, but he was at his most passionate when preaching about the need for gardening in everyone's life.

Allen R. Dedrick

Born on August 16, 1939 in Red Cloud, Neb., he graduated from the University of Nebraska in 1962.

He worked for the ARS for 45 years, including 25 years at the Water Conservation Lab in Phoenix and 7 years on the National Program Staff in Beltsville, MD. He felt very fortunate to have a career that he loved and for all of the colleagues and friends he had while working.

Al retired about 4 years ago in April 2005 after more than 42 years of outstanding service to ARS. At the time, he was Deputy Administrator on the National Program Staff, a position he had held since 1998. In this capacity Al served with distinction as the leader of ARS' natural resources research programs and also was a chief architect of several of ARS' still current national program

planning, quality assurance, and performance accountability systems.

Al came to ARS Headquarters from his former leadership position as Director of the U.S. Water Conservation Laboratory in Phoenix, a forerunner of the new ARS Arid Lands Agricultural Research Center in nearby Maricopa, Ariz. At Phoenix and other ARS locations where Al served earlier in his career, he made outstanding research contributions to advance irrigation and other water management technologies.

For these career-long engineering accomplishments as well as for his leadership in Agency wide program management, Al received from President Bush in 2002 the Distinguished Presidential Rank Award, an honor for which only the top five percent of all Senior Executives throughout the entire Federal Government are eligible. Al also received numerous other awards and recognitions from his research peers and supervisors in preceding years.

In addition to his outstanding professional career Al also excelled in his avocations. He was an avid and accomplished sport fisherman in both his pre- and post-retirement years. Along with family members and friends Al frequently engaged in outdoor ventures across the country. Among their favorite treks in recent years were annual winter trips all the way from Arizona to fish for Chesapeake Bay's famous striped bass. The circumstances of his tragic boating accident are not fully known, but clearly Al and his five companion fishermen encountered unexpected high winds and rough seas and their boat capsized into cold water and freezing air temperatures.

He was preceded in death by his son, Bradley Dedrick. He is survived by his loving wife of 49 years, Sharon, his daughter Laurie, son Craig, daughter-in-law Chris, grandson Michael--all of Phoenix.

A memorial service for Al was held on Thursday, January 22, 2009 at Shadow Rock United Church of Christ in Phoenix. The family has asked that any donations be made to: The Juvenile Diabetes Research Foundation (<http://www.jdf.org/>)

Beltsville Alliance Update

The Alliance met at Behnkes Nurseries on December 1 to conduct its 2008 Board of Directors annual meeting. Here are selected highlights from the reports of Alliance President John Peter Thompson and others:

- The Alliance is grateful for the seamless transition of common purpose from outgoing BARC director Phyllis Johnson to incoming director Joe Spence. The Alliance has enjoyed the benefits of uninterrupted communications and mutual support. The Alliance and BARC will move forward together.
- Much of the past year focus was encouraging development of a BARC plan (or vision) for the future. Though the Alliance understands a plan to be nearing its final stages, the plan will remain an internal ARS document until the agency may approve and release it.
- Board member Renee Winsky reported that on October 30, 2008, the Technology Development Corporation (TEDCO)/ARS Showcase, held near BWI Airport, had gone exceptionally well, boding powerfully for a growing research cooperation. Senator Ben Cardin, the feature speaker, delivered upbeat, highly complementary remarks for TEDCO, BARC and ARS. For more on the Showcase see:
<http://www.ars.usda.gov/Business/docs.htm?docid=17792>.
- Renee reported also that the much-discussed Enhanced-Use Lease Authority for BARC is moving forward. The firm PharmAthene is the most advanced in administrative process of four interested companies.
- John Peter Thompson, representing the National Invasive Species Council, participated in the planning meeting for ARS National Program 304, Crop Protection and Quarantine. He advocated strongly and effectively for systematics research.
- Looking ahead, John Peter Thompson said that the Alliance projects to organize and convene one or more BARC stakeholders

meetings in 2009. An Autumn 2009 timeframe may work best, he said.

Then news isn't all good, however. With the New Year came a few jarring real-world interventions. The greatest intervention by far came when Alliance President John Peter Thompson announced that, because of unrelated developments in his business world, he was left with no choice but to suspend most of his Alliance activities. As of this report, the Alliance has entered a somewhat of a "standby" mode, pending new developments. As events unfold, we will provide updates in future newsletters.

Jim Butcher, *BARC Alliance Liaison*



FAR-B Poinsettias Plant Sale

Friends of Agriculture – Beltsville (FAR-B) organized a Behnkes poinsettia plant sale in Fall 2008. Notices were sent out to all FAR-B members and to Beltsville Agricultural Center (BARC) employees in September for the poinsettias.

Pick-up was held in the National Visitor Center on December 2, 2008. The cost of each poinsettia was \$14.00 and 96 plants were sold. The money collected from the poinsettias has gone into a FAR-B fund to support BARC scientists.

FAR-B hopes to hold its 4th poinsettia sale in 2009 and will announce this in either August or September 2009. Notices are going out early as not to conflict with the Combined Federal Campaign.

Many thanks to all of you who supported this plant sale. We welcome any thoughts you may have about increasing our sales.

Freddi Hammersschlag at:
peachnfrog66@comcast.net



Friends of Agricultural Research-Beltsville, Inc.

Board of Directors

President: Vern Pursel
vpursel@comcast.net

Vice President: K. Darwin Murrell
kdmurrell@comcast.net

Treasurer: Dick Zimmerman
rhz1415@starpower.net

Secretary: Jim Anderson
janderso1@mac.com

Special Advisor: Essex Finney
eefinney2@msn.com

Membership: Allan Stoner
stonerfam@earthlink.net

CFC: Phil Kearney
pkearney@asrr.arsusda.gov

BARC Alliance Liaison
& Community Outreach: Jim Butcher
jim.hickory@verizon.net

Publicity: Hank Becker
hankbecker3@verizon.net

Fundraising: Freddi Hammerschlag
peachnfrog66@comcast.net

BARC Centennial: Roger Lawson
rlawson66@comcast.net

Liaison with ARS Info Staff:

Dianne Odland
dianneodland@ars.usda.gov

Liaison with BARC: David Chitwood
chitwood@ba.ars.usda.gov

To contact the FAR-B Board

email – *farbboard@comcast.net*

phone – (301) 854-9758

<http://www.ars.usda.gov/ba/far-b>

Beltsville Area

Area Director: Joseph Spence

Associate AD: Thomas Sexton

Nat'l Visitor Center:
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*Dedicated to promoting the research and education programs of the
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THE FAR-B NEWS

June 2009

Editor: Hank Becker

FAR-B Plans Friendship Day Gathering To Raise Funds

After a successful poinsettia plant sale in December 2008, plans to raise funds for FAR-B include a FAR-B/BARC Friendship Day gathering at the home of BARC retiree, Freddi Hammerschlag on Saturday, June 27, 2009 from 1-5 p.m.

The cost for adults is \$10 per person and children under 18 are free. All proceeds will support the 2010 BARC Centennial events. This event not only aims to raise funds but also to promote stronger ties between BARC employees and FAR-B members. You can download the flyer and send a check by mail (www.far-b.org/friendshipday.html) or pay by credit card on line.

FAR-B will also sponsor another poinsettia sale in December with notices going out in August/September.

Hope you will support FAR-B by attending Friendship Day and/or by purchasing Holiday poinsettias!

Freddie Hammerschlag, Fundraising Chair

National Agricultural Library while working on a M.S. and Ph. D. in Ag Economics, and attending many meetings at BARC in connection with her various positions in the Economic Research Service (ERS). She brought news that Dr. Rajiv J. Shah had been confirmed on May 12 as Under Secretary for REE, and that she would soon be returning to her position of Administrator of ERS.



Dr. Kitty Smith, Acting Under Secretary for Research, Education and Economics

Dr. Smith indicated she holds ARS scientists in highest regard for their dedication to finding solutions on the full range of problems in agriculture and human nutrition. She indicated that the Obama administration has designated several priority areas for ARS research emphasis that include: food safety, nutrition related to childhood obesity, sustainable and economic production of

President's Message

Dear Friends and Colleagues,

I am pleased to report that we had an excellent turnout for the 2009 FAR-B Annual Meeting on May 14. About 60 to 70 people were on hand to welcome Dr. Kitty Smith, Acting Under Secretary for Research, Education and Economics (REE), who was our keynote speaker this year. Dr. Smith is no stranger to BARC having spent considerable time over the years in the

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bioenergy, assessing and mitigating the risks of global climate change to agricultural production, and combating world hunger.

On April 21, I had the privilege of submitting FAR-B's annual testimony to the U. S. House and Senate Subcommittees on Agriculture, Rural Development, Food and Drug Administration, and Related Agencies of the Committee on Appropriations. If you take the time to read that testimony (located at www.far-b.org/Testimony.html) You will see that our funding requests for BARC are clearly in line with the priority areas Dr. Smith discussed during the annual meeting. However, it remains to be seen whether any increase in funding will find its way to BARC. One thing is certain – Maryland's congressional politicians aren't in danger of being accused of Pork Barrel spending for BARC!

Later on during the meeting John Peter Thompson, President of the National Agricultural Research Alliance – Beltsville, provided an update on his recent activities. He pointed out it has become evident that gaining support of Maryland's congressional leaders for BARC needs to begin with politicians at the county and state level. He strongly believes if BARC gained that support, then support at the national level would follow. Unfortunately, it appears to me that at present most local politicians are only concerned with making sure BARC's green space is maintained, rather than making sure that the world-class research that BARC provides is maintained along with its fields, forests and wetlands.

FAR-B business that was conducted during the annual meeting included the nomination and election of Jim Anderson to another 3-year term as Secretary, and election of Dr. Lewis Smith to the FAR-B Board of Directors. Lew began his career at BARC in 1961 in the Dairy Cattle Research Branch and held positions as Research Assistant, Dairy Scientist, Research Leader, and Institute Director before joining the National Programs Staff in 1988. We are pleased to have Lew on the FAR-B Board.

Please take note of the details regarding FAR-B / BARC Friendship Day to be held on June 27 at the Hammerschlag's lovely yard and garden. Proceeds from this fund-raising event will be used to support the 2010 BARC Centennial events, which will also be discussed later in this newsletter.

Vern Pursel, President

Area Director's Message

The Beltsville Area is jumping into the annual ARMPS or budget process this time of the year. This will help to identify funding issues for the coming fiscal year. We are optimistic that our efforts to control indirect research costs will begin to pay off and that we will not have to use our precious research dollars for anything other than research.

Along the lines of cutting costs, we are about to receive from the contactor a thorough review related to space utilization and recommendations for consolidation. I think this report will be more valuable to us than we had originally anticipated. Part of the reason is that we now have independent expert advice on the savings that could be realized as we move ahead with consolidation plans. As we can better utilize our existing facilities, we can then reap energy and maintenance savings.

We would like to see an ever increasing investment in our research; however, in the current environment that is not likely to happen. Many of our scientists have been aggressive and quite successful in attracting extramural grants and contracts. This has not only had the benefit of increasing our available resources but it has greatly increased the visibility of our research and our researchers. Competing for these funds has clearly demonstrated that Beltsville scientists are seen as among the top researchers in their field and can easily compete with academic researchers. A great example of a Beltsville success story is the bovine genetic prediction research being conducted in our Bovine Functional Genomics

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Laboratory. This research is revolutionizing the dairy industry and is a great model for other areas of genetic prediction in and outside of agriculture. This work was reported in *Science* – it is the April 24th issue with the cow on the cover! It is a great example of BARC scientists aggressively pursuing extramural support to leverage base funds to get the work done. This genomics approach is directly applicable to other commodities that are actively being pursued here.

Tom Sexton and I have completed our in person updates with each of the 32 labs in the Beltsville Area. It was a real pleasure to get to meet the scientists and staff and to hear of the really exciting research that is being conducted. Across the board, there were many examples of really the best agricultural research in the world. As we approach our centennial year, one can't help but wonder about how much this research is adding to the legacy of a long line of research excellence at Beltsville. I am convinced that we have best scientists and staff in ARS located at Beltsville. The new technologies that are available today greatly enhance our capabilities but the real strength of BARC is our ability to combine the technology with the on-farm expertise and capabilities that we have. There is no question that we delivery a tremendous value for the investment that the taxpayers have made in our research.

Joseph Spence, Area Director

FAR-B Community Outreach

It was another terrific year at the Beltsville Elementary School! FAR-B's 6th all-school Science Enrichment Program was held in the school's gymnasium April 28-30. "Chemistry in Everyday Life" was the theme, featuring hands-on learning stations on insect chemistry, food chemistry, and chemistry and the environment. Heartiest congratulations are in order to all who participated—including a number of BARC

scientists and several from FAR-B's Board of Directors.

A few juicy comments from teachers:

- "The presenters were knowledgeable, engaging, enthusiastic, and very good with the students!"
- "The students learned a lot and had fun while learning!"
- "The students LOVED being able to TOUCH!"
- "It's a great program!"

The event was followed by an all-school poster contest. Five winners were selected from each grade and were invited to a ceremony in which certificates and prizes were awarded by Dr. Joe Spence.

What's next on the agenda? Well, this month, FAR-B is sponsoring the BES Science Coordinator's attendance at a 5-day Maryland Agricultural Education Foundation (MAEF) program featuring hands-on workshops, field trips, and classroom-ready resources. The program is designed to help teachers effectively share the impact of agriculture in their daily lives using interesting and unforgettable lessons.

Then, next fall, FAR-B will partner with MAEF and *Sigma Xi* (The Scientific Research Society) to sponsor a 2-week BES visit by one of MAEF's mobile science labs. Working in teams, students will investigate problems using the scientific method and scientific equipment. Pretending they're BARC scientists, they'll hypothesize an experiment, collect data, and draw conclusions during hands-on activities related to everyday life.

FAR-B looks forward to this new direction and may, in the future, even consider expanding the program into additional schools.

The following Prince George's County Gazette article appearing on May 7 about says it all.

Diane Odland, Liaison with ARS Info Staff

[Reprint from Prince George's County Gazette]

Friends of Agricultural Research-Beltsville, Inc.

Beltsville Elementary School Gets Interactive Science Lesson

Program Unites Students, Retired Researchers

by David Hill | Staff Writer
dhill@gazette.net

Beltsville Elementary School students were treated to an "in-school field trip" April 28-30 when a group of scientists used games and hands-on exhibits to teach them the importance of chemistry.

The visit was part of the Science Enrichment Program, a partnership between Beltsville Elementary and nonprofit Friends of Agricultural Research-Beltsville.

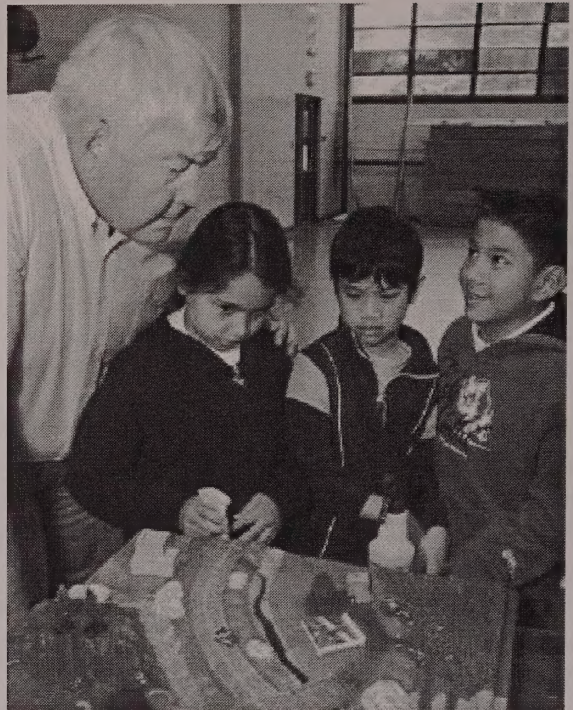
"We're lucky to have them come in like this," said Catherine Hopkins, a sixth-grade science teacher. "It's something different from the day-to-day."

Each year, retired scientists from FAR-B come to the school and lead a series of interactive lessons.

"We sort of consider Beltsville Elementary our adopted school," said Diane Odland, of West Friendship, outreach coordinator for the Agricultural Research Service and adviser to FAR-B. "The teachers and kids both look forward to this program every year."

The program began in 2004, when FAR-B members became worried about what they considered a decreasing emphasis on science in many schools. They approached Beltsville Elementary, less than 2 miles from BARC, about coming in and teaching the students.

"We thought, in a small way, we could help fill a void," said Allan Stoner of Hampstead, a 40-year BARC employee who now sits on the FAR-B board of directors. "[Science] is not becoming less important in their lives. It's probably become more important."



Photographer: Susan Whitney/The Gazette

(From left) Retired Agricultural Research Service scientist Allan Stoner, with the group Friends of Agricultural Research-Beltsville, shows Beltsville Elementary School second-graders Michelle Vasquez, 8, Oliver Masangcay, 8, and Francisco Salvador, 8, how chemicals dumped irresponsibly in watersheds can make their way into the Chesapeake Bay. The activity was part of the school's Science Enrichment Program on April 29.

In past years, the program has focused on nutrition, animals and plants. This year's theme was "Exploring Environmental Science."

Over three days, scientists taught one-hour lessons to first- through sixth-graders. Each class spent 20 minutes at three stations, each with its own distinctive lesson.

At the nutrition station, students learned the importance of food labels and played a rapid-fire game of "name the nutrient." At the insect station, they learned about blood-sucking bugs while sticking their hands — protected by netting — into a box of mosquitoes.

"It's all interactive," Hopkins said. "The kids are engaged in what they're doing. They're not bored to tears."

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At the chemical science station, a model city was used to demonstrate the dangers of pollution. Stoner placed a few drops of food coloring, representing a pesticide, on the town's grass. Students then used spray bottles to rain on the town, causing the dye to spread into the city's rivers.

"[This] can be helpful so you don't harm the earth by using bad chemicals," said Samantha Sweeney, 11, of Beltsville.

The lesson persuaded Richard Ayodele, 11, of Beltsville, to take better care of his own community.

"When I'm on the street, I'll sometimes litter. But now I know how much it affects the environment," he said. "We shouldn't do things to mess up the environment."

This is the sixth year that FAR-B has come to Beltsville Elementary.

This fall, FAR-B will partner with the Maryland Agricultural Education Foundation to bring mobile science labs to the school.

James Anderson, now of Silver Spring, worked at BARC for 37 years before retiring in 2005. In addition to helping with the enrichment program, he tutors reading and math at Beltsville Elementary once a week.

For Anderson and his colleagues, the program gives them a chance to help the community in which they've worked for more than half their lives.

"I used to live in Beltsville. My kids went to these schools," said Anderson, also on the FAR-B board of directors. "Maybe this is just a little way I can help back."

http://www.gazette.net/stories/05072009/prinnew174856_32544.shtml

and Prince George's Counties as well as support for an ARS exhibit at the American Chemical Society meeting this summer in Washington, DC.

Income from dues has been strong but it appears that support through the Combined Federal Campaign will be lower than last years' as will be the interest earned on FAR-B's savings accounts. A grant was received from *Sigma Xi*, through the D.C. Chapter, to support a new type of outreach program at Beltsville Elementary School this fall.

Richard Zimmerman, *Treasurer*

Combined Federal Campaign

Based on the information provided in our application, The Local Federal Coordinating committee for the Combined Federal Campaign of the National Capital Area (CFCNCA) approved FAR-B's participation in the 2009 Campaign. We join approximately 4,000 charities in the National Area database.

The successes of our applications are primarily based on the outstanding outreach program coordinated by Dianne Odland and her cooperators.

Last year, our local CFC campaign at BARC yielded approximately \$5,370. It is apparent that the current economy is having a negative impact on our contributions. Our 2008 committee distributed brochures to about 285 scientists located in the 33 labs in three institutes. We also contacted each support personnel who might be interested in contributing to FAR-B's CFC fund.

Phil Kearney, *CFC Chair*

Financial Report

The financial condition of FAR-B is still solid. Major expenditure so far this year have been in support of the Beltsville Poster Day in April, the Science Enrichment Program at Beltsville Elementary School, and middle school Science Fairs in Howard, Montgomery

BARC Centennial Program Plans for 2010

The Centennial program kickoff event will focus on 100 years of progress. Research contributions of historical significance will be highlighted along with more recent achievements related to issues of human

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nutrition, animal and plant health, food security and sustainability of production that are facing the nation.

The introductory presentation will be followed by a tree-and shrub-planting ceremony that establishes a Centennial Grove of trees and shrubs at BARC. The grove will include both old and new introductions developed at the U.S. National Arboretum. The initial event will provide an opportunity to welcome and inform leadership and the USDA, elected officials and the general public.

An issue of *Agricultural Research* magazine will be published that documents 100 years of progress. In the spring of 2010, the BARC Field Day will be convened that will demonstrate current research accomplishments.

Throughout the year, several lectures and mini-symposia are also planned. Topics will include high priority 21st century programs and projects at BARC. The overall chairperson for the BARC Centennial program is Kim Lewers. If you have question or comments, she can be contacted at Kim.Lewers@ars.usda.gov.

Roger Lawson, *BARC Centennial Planning Committee*

IN MEMORIAM

Paul L. Lentz, 90, a world-renowned expert on mushroom classification who led USDA's Mycology Lab and the National Fungus Collections, the Poison Fungi Center and research projects on fungal biology, died Jan. 14 at Vindobona Nursing Home in Braddock Heights. He had dementia.

Lentz joined the USDA at BARC in 1947 and rose from staff mycologist to chief of the laboratory. He wrote 47 papers on fungi, contributed to many others and made major presentations to the International Botanical Congress in 1959 and the Hesler International Symposium in 1968.

Those not as familiar with scientific literature might know Dr. Lentz's work through his

contribution to Microsoft's *Encarta Encyclopedia* on mushrooms.

Paul Lentz worked to develop the U.S. National Fungus Collections by obtaining funds to computerize the specimen data. This was started in the mid-1970's when computers were just becoming part of science.

Initially the data were typed on OCR (Optical Character Reader) sheets using special typewriters and sent to the National Agriculture Library to be read into the large mainframe computer. After 20 years, data from all one-million specimens has been entered so that scientists throughout the world can search on-line to find specimens needed for their research on fungi.

He taught at George Washington University and the USDA's Graduate School at the National Institutes of Health. He was made an honorary curator and later a collaborator for the Smithsonian Institution's Department of Botany. In 1971, he was appointed to the National Science Foundation's biological sciences advisory panel.

Paul Lewis Lentz was born in Indianapolis, where he graduated from Butler University. He received a master's degree in mycology at the University of Iowa, and then served in the Navy during World War II in Panama and at the bacteriology lab at the National Naval Medical Center at Bethesda.

After his military discharge, he settled in the Washington area to work for the USDA. He received a doctorate in mycology from the University of Iowa in 1953.

Dr. Lentz was a volunteer with the Boy Scouts and volunteered at Greenbelt Community Church. He was also on call for local hospitals in cases in which someone consumed wild mushrooms. He was an expert at determining which ones were poisonous.

Survivors include his wife of 65 years, Mary Ellen Cone Lentz of Frederick; two sons, Paul S. Lentz of Walkersville and David W. Lentz of Springfield; two sisters; and three grandchildren.

Friends of Agricultural Research-Beltsville, Inc.

Ernest E. Saulmon

Earnest E. Saulmon, 94, of Arlington, Va., died on March 25, 2008. Before retiring in the mid-1970s, he served as deputy administrator for Veterinary Services at USDA's Animal and Plant Health Inspection Service. Dr. Saulmon began his 38-year career with the USDA in the former Bureau of Animal Industry. In 1947, he became a member of the American team that helped stop the spread of foot-and-mouth disease in Mexico. Dr. Saulmon then worked in supervisory positions in Louisiana and Washington, D.C.

From 1965 to 1967, he served as Deputy Director of Science and Education for the USDA. Saulmon was then named director of the Animal Health Division in the USDA Agricultural Research Service. In 1970, he was reassigned as Deputy Administrator for Veterinary Services at the newly formed APHIS. A member of the National Association of Federal Veterinarians, Saulmon served as its delegate to the American Veterinary Medical Association (AVMA) House of Delegates in 1958 and from 1969 to 1974. He was twice elected to the AVMA Council on Public Health and Regulatory Veterinary Medicine, serving from 1968 to 1978. Dr. Saulmon served as the USDA representative to the White House Conference on Health from 1965 to 1967, and was a member of the National Board of Veterinary Medical Examiners for more than 10 years. He was also a member of the National Aeronautics and Space Administration's Apollo Lunar Quarantine Operations Team.

A diplomat of the American College of Veterinary Preventive Medicine and a past president of the District of Columbia VMA, Dr. Saulmon was a member of the American Association for the Advancement of Science, the U.S. Animal Health Association, the Washington Academy of Science, and Washington's Cosmos Club. He was also a member of the science advisory committees of the Pan-American Health Organization's Zoonoses Center and Foot-and-Mouth Disease Center.

Dr. Saulmon who graduated from The Ohio State University in 1939's received the Distinguished Alumnus Award in 1968. He was the recipient of the AVMA Public Service Award in 1973. He was a long time member of FAR-B.

Dr. Saulmon is survived by his wife, Catharine; a son; and three daughters. Memorials may be made to Clarendon United Methodist Church, 606 N. Irving St., Arlington, VA 22201; Arlington Chapter of the American Red Cross, 4333 Arlington Blvd., Arlington, VA 22203; or the Arlington Outdoor Education Association, P.O. Box 5646, Arlington, VA 22205.

ARS Bees at the White House

On April 9, Agriculture Secretary Tom Vilsack joined First Lady Michelle Obama and a group of 5th graders on the South Lawn of the White House to talk about healthy eating, the availability of locally grown fruits and vegetables, and bees.

This July, USDA will be providing two types of parasite-resistant honey bees developed by ARS scientists to pollinate the plants in the new White House garden this summer. Both of these bees are rapidly gaining in popularity with bee keepers.



2009 FAR-B Board Members (left to right): Dave Chitwood, Jim Anderson, Vern Pursel, Hank Becker, Freddi Hammerschlag, Al Stoner, Roger Lawson, and Dick Zimmerman

Friends of Agricultural Research-Beltsville, Inc.

Board of Directors

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vpursel@comcast.net

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jim.hickory@verizon.net

Publicity: Hank Becker
hankbecker3@verizon.net

Fundraising: Freddi Hammerschlag
peachnfrog66@comcast.net

BARC Centennial: Roger Lawson
rlawson66@comcast.net

Liaison with ARS Info Staff: Dianne Odland
dianneodland@ars.usda.gov

Board Member: Lew Smith

Liaison with BARC: David Chitwood
chitwood@ba.ars.usda.gov

To contact the FAR-B Board

email – *farbboard@comcast.net*
phone – (301) 854-9758
<http://www.far-b.org>

Beltsville Area

Area Director: Joseph Spence
Associate AD: Thomas Sexton
Nat'l Visitor Center:
Jennifer Woodward-Greene

FIRST CLASS

Friends of Agricultural Research-Beltsville, Inc.
PO Box 1061
Beltsville, MD 20705-1061





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Henry A. Wallace Beltsville Agricultural Research Center, Beltsville, Maryland

Friends of Agricultural Research-Beltsville, Incorporated P.O. Box 1061, Beltsville, MD 20704-1061

JANUARY 2010

Editor: Hank Becker

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In February and March a group of FAR-B members will once again be judging Middle School Science Fair projects in Howard, Montgomery, and Prince George's Counties. This has been one of our outreach activities for the past four years. Please call or email me if you're interested in helping out. We can use your help, and I guarantee you will enjoy visiting with these youngsters about their projects. There are lots of very bright boys and girls at these science fairs, and we believe our small cash awards and certificates helps keep them interested in science.

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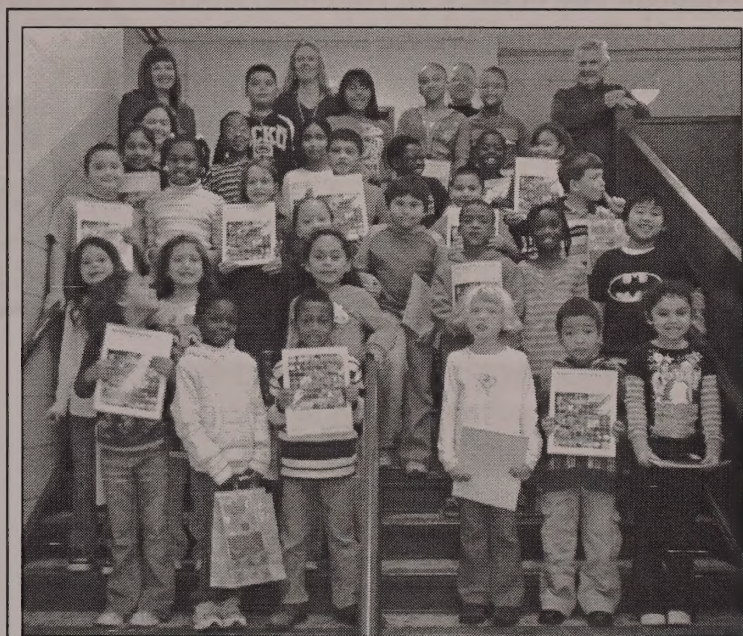
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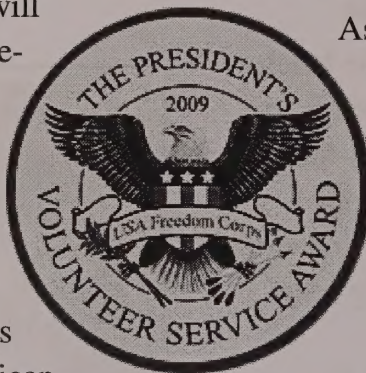
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You may have seen the banners with the Centennial logo outside of Building 003 and the Dairy on Powder Mill Road (the first buildings built at Beltsville). This is just the beginning of our Centennial celebration. In the next couple of months, there will be a special issue of *Agricultural Research* magazine that will highlight the many achievements of BARC scientists. We are looking forward to an expanded Public Field Day that will be held June 5th. Please mark your calendars and plan to join us and participate in the celebration. This event will be an opportunity to share our research success stories with the local community. We will have a political event in the form of a tree planting that will highlight one of the U.S. National Arboretum introductions. We are awaiting confirmation from our invitation for a high level figure to be honored at the event.

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As always, I want to thank FAR-B for its incredible support of BARC. I really hope that every member will join us in our Centennial celebration and recognize the role that each and every member has played in making BARC the world class research center that it is.

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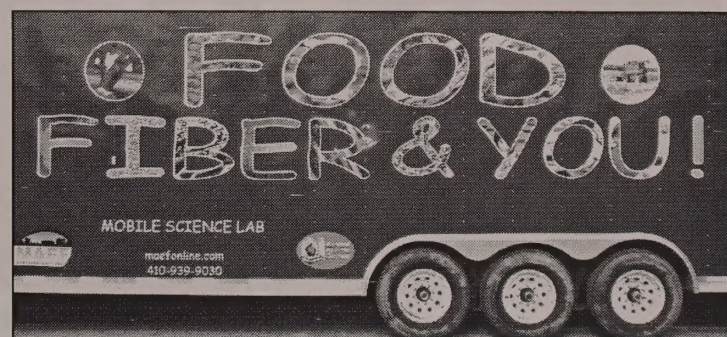
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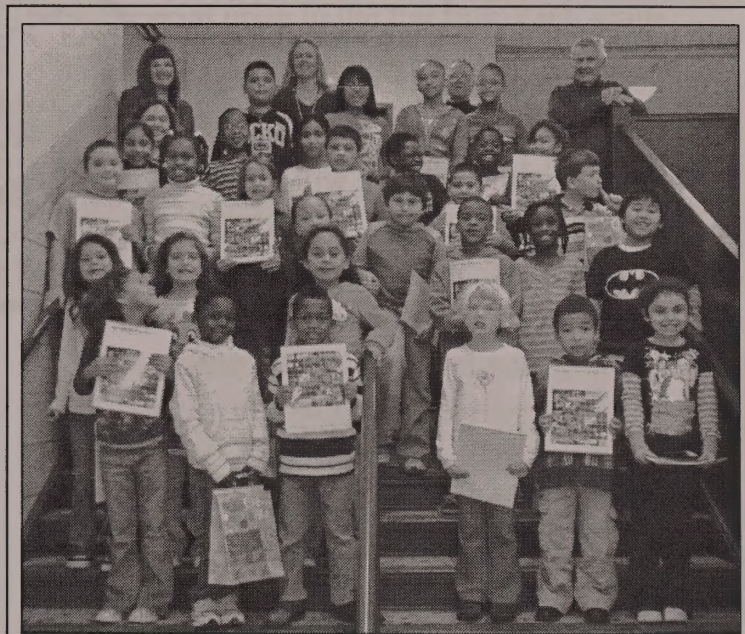
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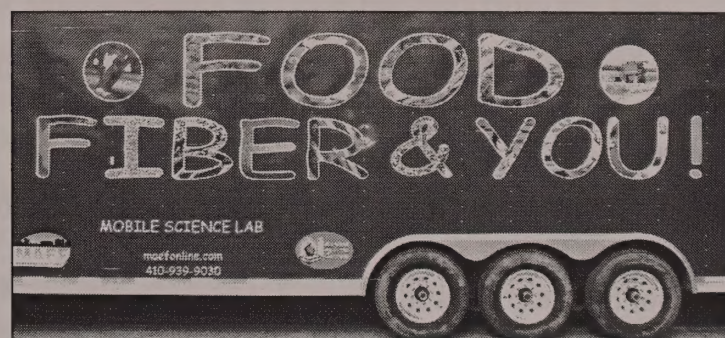
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page document. One of the most important parts of the application requires that we provide supporting documentation of our organizations "Substantial Local Presence." Thanks the exceptional efforts of Dianne Odland and her outreach committee, FAR-B's Science Enrichment Program at the Beltsville Elementary School has once again provided ample evidence of our local presence for our application. Vern Pursel and I completed the 2010 CFC Application on January 11, and I am pleased to report it is on its way to CFC Headquarters.

CFC headquarters in Washington was sufficiently impressed with FAR-B's Science Enrichment Program that they sent this document to the White House. Subsequently we received a letter from the White House and the Presidents Volunteer Service Award Committee thanking FAR-B for helping to address the most pressing needs in our community and our country. Congratulations were prepared on behalf of members of the President's Council on Service and Civic Participation.

Phil Kearney, CFC Chair

FARB Membership Update

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IN MEMORIAM

John Creech

Dr. John L. Creech died at age 89 in Columbus, North Carolina on August 7, 2009. Born in Woonsocket, Rhode Island, he was a graduate of the University of Rhode Island with a BS in Horticulture. During World War II, he served in the U.S. Army during, where as a first lieutenant in the First Infantry Division, he was captured by Erwin Rommel's Africa Corps. He and other POWs were flown to Germany where they were sent to camp OFLAG 64 in Schubin, Poland from 1943 until 1945. While there, he was one of the men who raised plants in a 60-foot greenhouse to supplement the food for over 1,500 prisoners.

The following March, he writes, "We spaded that 2 1/2 acres. I started 6,000 tomato plants and talked the Germans into giving us three cold frames, which I filled with beet and lettuce seeds. Since we needed the food desperately, I tried to remember the schemes my brother used back in Rhode Island, in the tiny greenhouse that produced so much each year."

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He first joined ARS in 1967 as a Post-Doctoral Fellow with the ARS Southeast Watershed Research Center, Tifton, Georgia. Shortly after, he became a Botanist/Soil Scientist at the USDA-ARS Sedimentation Lab, Oxford, Mississippi (1968–1977). In 1978, he moved to Beltsville, to serve on the ARS National Program Staff and later joined the Hydrology Lab in 1983 as a Soil Scientist.

Dr. Ritchie had an illustrious career with ARS that spanned 42 years. He is recognized internationally for his contributions over a broad range of scientific disciplines. His research has contributed significantly to a better understanding of radionuclide movement in ecosystems; sediment deposition process, rates, and patterns; erosion processes, rates and patterns; remote sensing of spatial and temporal water quality patterns, spatial and temporal landscape roughness measurements and applications; the use of native vegetation for improving marginal soils and controlling soil loss, and the redistribution and

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One of Dr. Ritchie's most significant contributions, that had enormous impact on water quality assessments, involved the use of naturally occurring radioactive fallout as a tracer to measure sediment deposition rates in lakes, reservoirs and floodplains, and to also measure soil erosion patterns at the farm scale. This technique is used extensively by reservoir managers--power companies, U.S. Army Corps of Engineers, U.S. Geological Survey, Natural Resources Conservation Service--to determine recent sediment deposition rates and as a geochronological tool to provide the time markers for determining time distribution patterns of other substances--pesticides, heavy metals, and carbon--in depositional environments. The use of naturally occurring radioactive fallout for measuring erosion and sediment deposition is currently promoted and supported by the International Atomic Energy Agency and the Food and Agricultural Organization of the United Nations for worldwide use as the preferred method for studying soil quality, erosion, and redeposition in sustainable agriculture systems.

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eefinney2@msn.com

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stonerfam@earthlink.net

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kearneyp@umd.edu

BARC Alliance Liaison & Community Outreach:
Jim Butcher
jim.hickory@verizon.net

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Dianne Odland
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TO CONTACT THE FAR-B BOARD

Email – farbboard@comcast.net

Phone –301-854-9758

Website – <http://www.far-b.org>

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page document. One of the most important parts of the application requires that we provide supporting documentation of our organizations "Substantial Local Presence." Thanks the exceptional efforts of Dianne Odland and her outreach committee, FAR-B's Science Enrichment Program at the Beltsville Elementary School has once again provided ample evidence of our local presence for our application. Vern Pursel and I completed the 2010 CFC Application on January 11, and I am pleased to report it is on its way to CFC Headquarters.

CFC headquarters in Washington was sufficiently impressed with FAR-B's Science Enrichment Program that they sent this document to the White House. Subsequently we received a letter from the White House and the Presidents Volunteer Service Award Committee thanking FAR-B for helping to address the most pressing needs in our community and our country. Congratulations were prepared on behalf of members of the President's Council on Service and Civic Participation.

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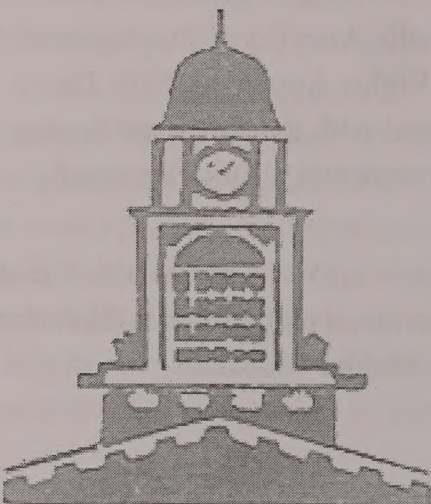
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THE FAR-B NEWS

Dedicated to promoting the research and education programs of the
Henry A. Wallace Beltsville Agricultural Research Center, Beltsville, Maryland

Friends of Agricultural Research-Beltsville, Incorporated P.O. Box 1061, Beltsville, MD 20704-1061

JUNE 2010

Editor: Hank Becker

President's Message

Dear Friends and Colleagues,

On May 13 the 25th annual meeting of Friends of Agricultural Research – Beltsville was held in the Conference Room of Building 005, BARC-West. The keynote speaker this year was Dr. Cheng-I Wei, Dean of the College of Agriculture and Natural Resources at the University of Maryland.

About 40 members and guests were in attendance as Dean Wei discussed his views on various challenges and opportunities that the University, BARC, and agriculture in general faces in the years ahead. Some of the major challenges Dean Wei discussed were: potential food shortages and world hunger due to population growth, providing a safe, secure, more nutritious food supply, dealing with water quality and quantity issues in the face of climate change, and is-

sues regarding biotechnology and biofuels as affecting agricultural production and uses of renewable natural resources.

It is clear that Dean Wei's researchers at the university face the same funding issues as the scientists here at BARC do in conducting research to meet some of these challenges. He pointed out that many of these challenges may best be met by increased cooperation between the university and BARC scientists. While the university and BARC have had numerous cooperative endeavors in the dairy, agronomy, horticulture, and biotechnology research in the past, Dean Wei indicated there is considerable room for more joint research efforts in the future.

Following a lively question and answer session between Dean Wei and the audience, Dr. Tom Sexton provided a brief update on current issues facing BARC, which will appear below in this newsletter.

BARC Friendship Day Gathering Set for July 17

After a successful poinsettia plant sale in December 2009, plans to raise funds for FAR-B include a second FAR-B/ BARC Friendship Day gathering at the home of BARC retiree, Freddi Hammerschlag on Saturday, July 17, 2010 from 1-5 p.m. The cost for adults is \$12 per person and children under 18 are free. All proceeds will support the 2010 BARC Research Programs.

Again, this event not only aims to raise funds but also to promote stronger ties between BARC employees and FAR-B members. You can download the flyer and send a check by

mail or pay by credit card on line (www.far-b.org/friendshipday.html). Note: this year, in lieu of attending Friendship Day, you can make a donation to FAR-B.

FAR-B will also sponsor another poinsettia sale in December with notices going out in August or September.

Hope you will support FAR-B by attending Friendship Day and/or by purchasing poinsettias! Many thanks in advance for your support and thanks to all of you who have supported us in the past!

Freddi Hammerschlag, Fundraising Chair

It was my pleasure to begin the business portion of the meeting by presenting the FAR-B Distinguished Service Award to Dr. Phil Kearney. Phil is a Charter Member of FAR-B and had an illustrious 32-year research career at BARC as a Research Chemist at the bench, Research Leader of the Pesticide Degradation Lab, and Director of the Natural Resources Institute before retiring from ARS and serving as the Associate Director of the Maryland Water Resources Research Center at the University of Maryland for an additional 15 years. Phil has made immense contributions to FAR-B serving as President from 1996 to 1998, Vice-President from 1999 to 2002, and Chairman of our CFC Committee from 2000 until this past February. Phil's sterling efforts on the CFC Committee have brought FAR-B about \$50,000 in donations during the past 10 years.

During the remainder of the meeting I gave a Power Point presentation illustrating the various events that FAR-B sponsored during the past year, most of which have been covered in either this newsletter or the January issue, and can be seen at www.far-b.org/Events.html.

Late winter and spring are a busy time of year for FAR-B activities. In February and March a few of our faithful members and volunteers served as FAR-B judges at area Science Fairs held in Howard, Montgomery, and Prince George's County. This has been one of FAR-B's outreach activities for the past five years. This year FAR-B awarded \$10, \$20, and \$30 gift certificates to 30 Middle School students for their superior posters. Each year, one or two of the student awardees send FAR-B a note to thank us for their award. This year we received the following email from one of FAR-B's first place awardees at the Prince George's Area Science Fair that I think you will enjoy reading:

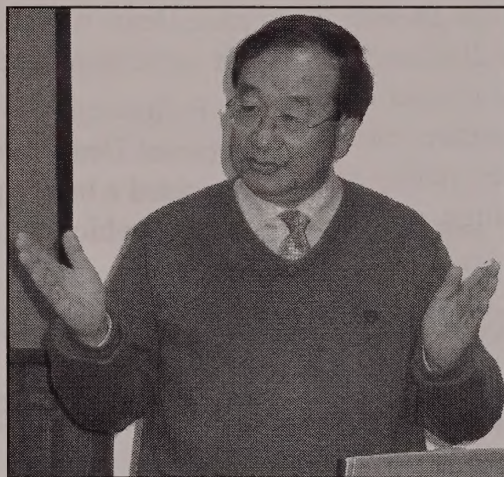
*Dear Friends of Agricultural Research - Beltsville,
Thank you very much for the \$30 Target gift*

card for my third place finish in the Environmental Analysis category at the Prince George's Area Science Fair. My project was about nitrogen vs. phosphorus in various bodies of water in the Anacostia River watershed and the effect of rainfall.

I am an 8th grader at Hyattsville Middle School and science is one of my favorite subjects. My mom did her lab work at your site for her master's degree in horticulture, and we drove through your beautiful fields and woods on Saturday on the way back from an orchestra competition in the Baltimore area. I really enjoyed seeing other students' projects at the science fair open house and I noticed some students did their research in your facilities.

Area science fair was a great experience for me - I have been doing science fair projects since I was a 4th grader at University Park Elementary School but this is the first year my project went to the area level.

*Sincerely,
Parker Krueger*



Dr. Cheng-I Wei, Dean of the College of Agriculture and Natural Resources at the University of Maryland.

While Parker evidently received a third place award from the category judges, our FAR-B judge, Jim Smith, gave him a first place award. Based on Parker's letter, I think Jim picked a real "winner"!

On March 18, I had the privilege of submitting FAR-B's annual testimony to the U.S. house and Senate Subcommittees on Agriculture, Rural Development, Food and Drug Administration, and Related Agencies of the Committee on Appropriations. We are once again greatly indebted to Jim Butcher for doing the heavy lifting in composing our testimony. This year's testimony requested an increase of \$13 million for the Beltsville Agricultural Research Center, which was in line with President Obama's 2011 budget submission. I invite you to read the complete text of the testimony FAR-B submitted on the web at www.far-b.org/Testimony.html.

In closing, if you haven't already done so, please send in your membership dues. Also, don't forget to join us at the 2nd Annual FAR-B/BARC Friendship Day on July 17, 2010.

Vernon Pursel, President

Area Director's Message

This is turning out to be a great year for the Beltsville Area!

Our Centennial activities kicked off with a visit by USDA Secretary Vilsack, Acting Undersecretary Jahn and Congressman Steny Hoyer. They met with a number of scientists in their labs and met with a packed house in our auditorium to address the employees. It is clear that there is support for agricultural research and specifically the work being conducted in the Beltsville Area. But as was pointed out, the economy and the pressures being put on discretionary spending will not go away anytime soon. Although the administration's FY2011 budget request is very good for the Beltsville Area, it remains to be seen what our actual appropriation will be.

Everyone at Beltsville is excited about our upcoming Public Field Day on June 5th. This will be our biggest field day ever and we are sure it will be our best. The much needed work on the clock tower, which has come to symbolize the Center, has been completed and it looks great. For this field day we will put our best foot forward and highlight the outstanding work that we do and the tremendous return on investment to the public.

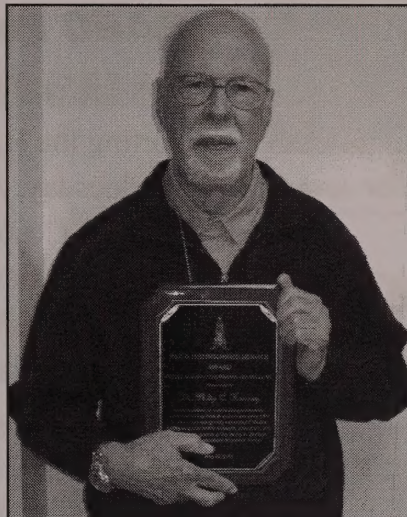
It is also with great pleasure that we recently learned of the election of one of our scientists to the most prestigious National Academy of Sciences. Dr. Jitender P. Dubey, known to many of us as JP,

recently received this much deserved recognition. This is a rare honor that is most unusual for a parasitologist and for an agricultural researcher. When we add Dr. Dubey to the list of Beltsville scientists who have achieved such recognition, his election to the Academy serves as an inspiration to all of us in the Beltsville Area.

Lastly, I am pleased to report that as we prepare our FY2011 ARMP's packages, we can see that the cost saving measures we have made in the Beltsville Area continue to be successful. For the coming year, we have reduced indirect research costs by well over one million dollars. Significantly, these saving have not come at the expense of a reduction in services. In addition, we have been able to establish a program for improving the appearance of the grounds and buildings at BARC and to re-establish a much needed preventative maintenance program.

As always, I want to thank FAR-B and its members for their ever present support of BARC. That support really does make a difference to help make BARC the outstanding world-class leader in agricultural research that it is.

Joseph Spence, Area Director



**FAR-B Distinguished Service
Awardee Dr. Phil Kearney.**

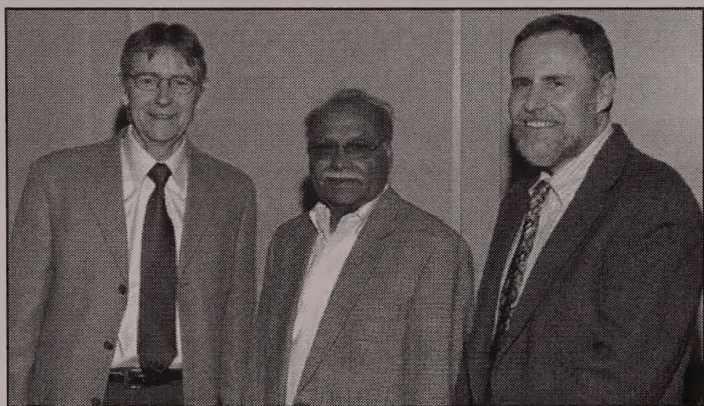
Financial Report

The financial condition of FAR-B continues to be good. Major expenditures so far this year have been in support of the Beltsville Poster Day in April and middle school Science Fairs in Howard, Montgomery and Prince George's Counties. Again this year, the Science Enrichment Program at Beltsville Academy will be one of the major programs supported, although the timing has moved this to the fall rather than the spring. FAR-B will also be contributing support to the new Demonstration Garden between buildings B-006 and B-007

and other BARC Centennial activities.

Through the end of April, income from dues is slightly lower so far than in 2009. Similarly, support through the Combined Federal Campaign, FAR-B's single largest source of income, is lower than last years as is the interest earned on FAR-B's savings accounts. Nevertheless, FAR-B should have sufficient income to support all programs planned for this year

Richard Zimmerman, Treasurer



Robert Davis, Jitender Dubey and BARC Director Joseph Spence. (Left to Right)

Dr. Dubey Elected to National Academy of Sciences

Dr. Jitender P. Dubey, Microbiologist in the Animal Parasitic Diseases Laboratory, has been elected to membership in the National Academy of Sciences in recognition of his highly productive career and outstanding contributions to the mission of ARS. He has achieved great international recognition from his peers in agriculture, veterinary medicine and public health. He is recognized for contributions to the control and biology of three major parasitic diseases of livestock and humans (toxoplasmosis, neosporosis, and equine protozoal myeloencephalitis, EPM) caused by single-celled parasites, *Toxoplasma gondii*, *Neospora caninum*, and *Sarcocystis neurona*, respectively. There are no effective vaccines or drugs to eliminate these parasites in tissues. Control measures for these diseases

and/or prevention of transmission to humans are based on farm management practices and hygienic measures based largely on the research that Dr. Dubey has published.

Dr. Dubey has received awards from many international organizations, including the most highly cited authors in Animal Sciences discipline worldwide for the decade that ended in 2001 by Current Contents, Institute of Scientific Information, U.K. Dr. Dubey has more than 1200 peer reviewed publication--many of them in high impact journals (*Science*, *Nature*, *Proceedings National Academy of Sciences*) and has collaborated with more than 400 scientists worldwide.

Vernon Pursel, President

BARC Poster Day

FAR-B once again played a major role in supporting the BARC Poster Day that was held on Wednesday, April 21, 2010, at the ARS National Visitors Center. FAR-B presented cash awards to the top three student intern posters, as well as, providing refreshments and lunch for all participants and tent-rental to accommodate poster displays.

This year a total of 29 student interns were entered in the poster competition and 43 Post-doctoral Research Associates, Visiting Scientists, and new Research Scientists presented posters.

Winners of this year's student intern poster competition were: First Prize (\$300) - Ankur Patel, Eleanor Roosevelt High School, Mentor: Pat Millner, Environmental Microbial and Food Safety Laboratory, Effects of soil solarization on a non-toxigenic *Escherichia coli* O157:H7 strain; Second Prize (\$200) - Jasmine Harper-Davis, Eleanor Roosevelt High School, Mentor: Brian Bowker, Food Quality Laboratory, Measurement of purge protein composition as an indicator of beef tenderness; Third Prize (\$100) - Melanie Dennis, Eleanor Roosevelt High School, Mentor: Janet Slovin, Genetic Improve-

ments of Fruits and Vegetables Laboratory, The small heat shock protein gene families in *Fragaria vesca*.



Left to right: Melanie Dennis, Jasmine Harper-Davis, and Ankur Patel.

FAR-B COMMUNITY OUTREACH SLURP!!!

Ever see a toddler in a disposable diaper sagging near the ground and wondered in wide-eyed amazement how much liquid those things can actually hold?

Well on April 20 and 22, thanks to FAR-B outreach gurus Allan Stoner and Jim Anderson, eight 6th and 7th grade science classes at Beltsville Academy (formerly Beltsville Elementary School) found out—the scientific way!

From hypothesis to conclusion... students had fun learning about the amazing properties of poly-absorbents. Back in the 1970's ARS scientists married cornstarch to a synthetic chemical and created a product so thirsty, it could absorb hundreds of times its own weight in water. Someone called it "Super Slurper," and the name stuck. The absorbent compound, which can slurp up to 2,000 times its weight in water, is used in a variety of products—fuel filters, baby powders, and wound dressings, for example. Compounds very much like it are now used in

disposable diapers.

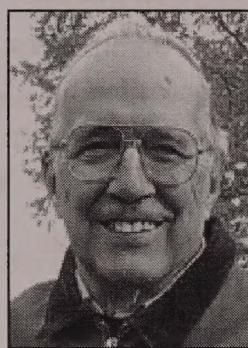
As part of FAR-B's ongoing Science Enrichment Program at Beltsville Academy, the diaper experiment was included in a Science in Your Shopping Cart lesson to show one of the many ways that agricultural science contributes to everyday life. A mini-shopping cart containing a wide variety of ARS-produced technologies served as the basis for discussions and for a follow-up quiz. At the end of each class a copy of the *ARS Science in Your Shopping Cart* was sent home with each student.

Al and Jim have been actively involved in the Science Enrichment Program for several years now, enjoy interacting with students, and agree that the highest reward in outreach is to see kids actively engaged in hands-on activities that help them learn real-life lessons.

The answer you're waiting to hear: Over 2 pounds!

Jim Butcher, BARC Community Outreach

IN MEMORIAM



Paul A. Putnam

Dr. Paul Adin Putnam, 79, passed away unexpectedly on Saturday evening, May 8, 2010, at Dartmouth-Hitchcock Medical Center. He was born on July 12, 1930, in Springfield, Vt., the son of Beatrice (Baldwin) and

Horace Putnam. He graduated from Springfield High School and was an All-State player on the 1947 State Championship Football Team. Always an honors student, he received academic scholarships to the University of Vermont for his B.S., Washington State University for his M.S. and Cornell University for his Ph.D. Paul Putnam was a distinguished agricultural scientist and had numerous publications while working

for the USDA for 37 years. He was a natural leader who became the Area Director of the Beltsville Agricultural Research Center in Maryland, when it was the world's largest agricultural research center. After his service at Beltsville, Paul served as the Area Director of the Midwest Area in Ames, Iowa in the mid 1980s and as the Area Director the Mid South Area in Stoneville, Mississippi in the early 1990s. He was a member of numerous scientific societies and was particularly active in the American Society of Animal Science. In recognition of his leadership, he was appointed to the U.S. Senior Executive Service, representing our nation's top civilian leaders.

While in Ithaca, New York, he met and married the love of his life, Elsie Ramseyer of Oklahoma, and they celebrated 54 years together. He and Elsie raised a family that includes three daughters, Pamela Crowley of Beavercreek, Ohio; Penelope Rupp of Mechanicsburg, Pennsylvania; Paula Cornelius of York, Pennsylvania, and one son, Tyler Putnam of Fincastle, Virginia. He had nine grandchildren.,

Paul's commitment to his hometown of Springfield was the focus of his "second career." He served the town as a selectman and chair of the Select Board and contributed on numerous committees and town boards, including Rotary International, Springfield on the Move, and the Edgar May Health and Recreation Center.

Paul was a very positive, engaging man and his warm humor and goodwill were a force of great good for all those who knew him. He will be remembered as a man of many talents and interests, an excellent artist, musician, writer and world traveler. Paul was a true Vermont farmer, and was passionate about working in the fields and woods of his family's 150-year-old dairy farm. In fact, he was active on his farm up until the day of his hospital admission. He brought his science and academic skills to the land and had written several books about Vermont farm life.

In lieu of flowers, memorial contributions may be made to the Springfield United Methodist Church, 10 Valley St., Springfield, VT 05156; or the Edgar May Health and Recreation Center, 140 Clinton St., Springfield, VT 05156.

John Landis Hyde

John ("Jack") L. Hyde, 85, died on Monday, April 19, 2010 at the Cayuga Medical Center. Dr. Hyde is survived by his son, John Hyde Campbell of Livermore, CA and two granddaughters, Stephanie Campbell-Painter of Sacramento, CA and Erica Campbell of La Jolla, CA, and one great-granddaughter.

Dr. Hyde was born as "Jack Cunningham" on May 17, 1924 in Greensboro, NC. His birth parents were Jack and Rita Cunningham. The family suffered severe set-backs during the great depression and at age 9 Jack was left at a local orphanage. He was adopted at age 11 by Rev. Albert and Erva Hyde during which time his name was changed to Hyde.

The Hydies eventually came to Trumansburg, NY where Jack attended Trumansburg Central School for several years. Beginning his sophomore year, he received a basketball scholarship and attended New Hampshire Preparatory School.

Jack joined the US Navy in 1942 and served as a Pharmacist's mate during World War II caring for wounded and sick soldiers until his discharge in 1945. He attended Cornell University under the GI Bill and received his Bachelor of Arts in 1949, Doctor of Veterinary Medicine in 1954, and Master of Science in 1959.

After receiving his DVM, Jack worked at a small animal clinic in New Jersey. In 1959, he joined the faculty of the University of Pennsylvania School of Veterinary Medicine as an instructor in large animal veterinary medicine and did research for several years.

In 1961, he joined the ARS scientific staff at the Plum Island Animal Disease Center located off the North Fork of Long Island. He eventually rose to be Assistant Director and for 12 years served as the Chief Biological Safety Officer. His research in biological safety cemented his reputation as an expert in containment of both foreign and domestic animal diseases, a skill for which he was internationally recognized.

In 1975, Jack moved to the USDA Agriculture Research Center in Washington D.C. where he directed programs on foreign animal disease containment in Europe, Africa, China and Korea. He later joined USDA, APHIS in charge of International Programs in Veterinary Services. Jack was totally dedicated to the control and eradication of animal diseases and protecting U.S. livestock.

He retired from the USDA in 1985 but remained active as an expert in animal disease containment until his death. During his retirement, Jack worked extensively in Korea. He remained active in veterinary medicine as a member of the New York State Veterinary Medical Society and the Southern Tier Veterinary Medical Association for which, at one point, he served as president.

Although a dedicated professional, Jack loved good food, lively conversation, and a "couple of snorts" with his close friends. When telling his many yarns he always had a twinkle in his deep blue eyes and a devilish grin. Jack was also an avid outdoorsman during his younger years and hunted and fished many of the local areas. He passed his love of the outdoors and fly-fishing onto his son.

At his request, Jack will be cremated and his ashes scattered in a local wooded area where he spent some of his happiest moments as a young man. Also, he did not want a funeral service. However, being true to his Irish roots, he requested a celebration at a local restaurant/bar where all his friends could toast him a fair voyage and exchange yarns of his exploits (there were many).

The celebration will be held on the afternoon of Friday, June 11. Please contact the Perkins Funeral Home in Dryden at 607-844-8161 for further information. In lieu of flowers, the family requests any gifts in his memory be sent to the SPCA at 1640 Hanshaw Road, Ithaca, NY 14850 or Hospicare, Tompkins County, 172 East King Road, Ithaca, NY 14850. www.perkinsfuneralhome.com.

BARC Celebrates 100th Birthday on June 5th, Public Field Day

"At BARC, We've Only Just Begun," Beltsville Agricultural Research Center Director Joseph Spence writes in the Forum space of the April 2010 issue of *Agricultural Research Magazine*. "For an agricultural research facility that started out in 1910 with a single dairy barn, we've done pretty well over the years," allows Spence in admirable understatement.

Actually, that comment might easily be recast to read something like this: "From its modest beginning, BARC became the world's largest, most

diversified agricultural research complex. It became the nation's flagship agricultural research center, an internationally acclaimed gold standard of agricultural research excellence." The April *Agricultural Research Magazine* commemorates milestone BARC accomplishments of the past, salutes the present, and looks ahead to that which is to come. The magazine is on-line at: <http://ars.usda.gov/is/AR/>.

Jim Butcher, BARC Community Outreach

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david.chitwood@ars.usda.gov

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TO CONTACT THE FAR-B BOARD

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stonerfam@earthlink.net

Email – *farbboard@comcast.net*

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Phone –301-854-9758

Website – <http://www.far-b.org>

BARC Alliance Liaison & Community Outreach:
Jim Butcher
jim.hickory@verizon.net

BELTSVILLE AREA

Area Director: Joseph Spence

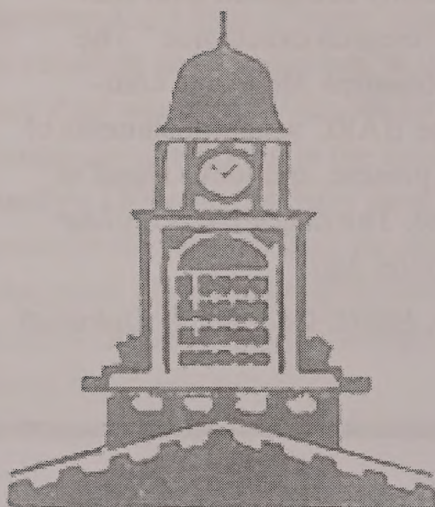
Publicity: **Hank Becker**
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First Class

Friends of Agricultural Research–Beltsville, Inc.
P.O. Box 1061
Beltsville, MD 20705-1061





THE FAR-B NEWS

Dedicated to promoting the research and education programs of the
Henry A. Wallace Beltsville Agricultural Research Center, Beltsville, Maryland

Friends of Agricultural Research-Beltsville, Incorporated P.O. Box 1061, Beltsville, MD 20704-1061

JANUARY 2011

Editor: Hank Becker

President's Message

Dear Friends and Colleagues,

I hope this finds that the past year treated you well and that you are more than ready for the new one.

At the January 11 meeting of the FAR-B Board of Directors we put the final touches in place for launching the FAR-B Summer Internship program. Beginning this fiscal year FAR-B will provide funding in the amount of \$2,500 toward a summer intern for a permanent scientist in each of the three Institute/Centers located at BARC. A committee composed of three scientists within each Institute/Center will evaluate the applications and select the applicant they believe will provide a student intern the best opportunity

to interact and learn about agriculture research in a laboratory setting. It is our sincere hope that these internships will provide meaningful research experiences for academically promising high school senior or college students so that they will consider science/agriculturally-related careers when they complete their formal education.

Once again a group of FAR-B members will be judging Middle School Science Fair projects in Howard, Montgomery, and Prince George's Counties. This has been one of our outreach activities for the past five years. There are lots of very bright boys and girls at these science fairs, and we believe our small cash awards and certificates helps keep them interested in science. If you're interested in helping out

Come Join Us on Friendship Day

Meet your friends in FAR-B/BARC

Enjoy some snacks, walk through the extensive garden and just chill out...

There will be door prizes!

Sunday, June 26, 2011 • 1:00 – 5:00 p.m.

at the home of: The Hammerschlags

7106 Deer Valley Road, Highland, Maryland 20777 • Phone: 301-854-2674

Off of Mink Hollow Road, between routes 216 and 108 • Please park at top of hill and walk down to house

\$12 donation per person (children under 18 free) • All proceeds to support the 2011 BARC Research Programs

Make checks payable to: FAR-B, or pay by credit card online at: www.far-b.org/friendshipday.html

Send by Friday, June 10, 2011 to:

FAR-B

P.O. Box 1061

Beltsville, MD 20704-1061

Name(s): _____

E-mail address: _____

In lieu of attendance, please accept my donation of \$ _____

please call or send me an email. We can use your help, and I guarantee you will enjoy visiting with these youngsters about their projects.

In April, FAR-B will again be hosting the luncheon for the BARC Poster Day and presenting awards to the top three posters that will be presented by the High School Interns that are working in various BARC laboratories.

In May, we hope to see you at the FAR-B Annual Meeting, which is tentatively scheduled for May 10.

Another event that I hope you will keep in mind is the 2nd FAR-B/BARC Friendship Day that is scheduled for Sunday, July 26. It will once again be held at the lovely home and spacious yard of Freddi and Dick Hammerschlag.

In closing, please remember that it's time to send in your membership dues, which are quite essential for FAR-B to continue our support of various activities at BARC.

Vernon Pursel, President

Area Director's Message

Best wishes for 2011 to the FAR-B community. The past year has been an exciting year for the Beltsville Area and we look forward to the coming year. Beltsville Area scientists continue to be recognized worldwide for their outstanding research success and this success would not be possible without the support of all of the staff in the Area. Their dedication is seen everywhere and is much appreciated.

Despite our many successes, there are an increasing number of challenges on the horizon. We have a work force made up of a growing number of retirement-eligible employees. Replacing them will be a major challenge in the coming years. While we have seen decreases in the number of employees in the Area, we have been successful in carrying out our mission and delivering a tremendous return on investment by the public. We have filled a number of key positions in the Area including several Research Leader vacancies, scientist vacancies, and a

new Technology Transfer Coordinator. Of note, we have a new Director of the U.S. National Arboretum. She is Dr. Colien Hefferan who brings a wealth of experience and expertise to the position; her leadership at the Arboretum has already been evident and is much appreciated.

It is that time of the year that we are awaiting the release of the President's budget for 2012 and yet we are still operating on a Continuing Resolution for the 2011 Fiscal Year and the ensuing uncertainty associated with it. Both the Administration and the new Congress have a challenge to keep spending down and will no doubt take a careful look at discretionary spending as part of the budget process. No one knows how this process will play out. While I expect the next few years will be challenging, I know that Beltsville is well positioned despite the uncertainty we are facing. Beltsville Area scientists are actively involved in, and in many cases leaders in, many of the Department's priority areas. The need for safe, readily available, and nutritious foods that are protected against emerging threats is not going to disappear. As long as the research conducted in the Beltsville Area continues to be relevant and at the cutting edge of agricultural research, I am convinced that we can build on the strong legacy of research that exists here.

When I was appointed as Director of the Beltsville Area in 2008, I wrote in the FAR-B newsletter that we faced internal and external challenges. In three years, I believe that everyone in the Area has been successful at meeting many of the internal challenges. I am pleased to see that indirect costs have decreased, improvements to the physical facilities have taken place, staff have found ways to save energy, and there have been increases in productivity. I think the team effort that we have taken to respond to our internal challenges will serve us well to address the external challenges on the horizon. Regardless of our budget, I know BARC will continue to conduct the best research program possible with the funding we are provided.

As always, I am sure I speak for everyone in the Beltsville Area in thanking FAR-B for its incredible support.

Joseph Spence, Area Director

Financial Report

In 2010, FAR-B had income of \$17,557 and expenses of \$8,612 for a net income of \$8,945. Income consisted of dues (\$4,458), donations and dues paid through the Combined Federal Campaign (\$6,176), direct donations (\$2,700), interest and dividends on reserve funds and investments (\$2,949), fund raising activities (\$1,235) and other (\$39). Income from CFC was nearly \$900 higher than in 2009, but all other categories of income were lower than the previous year. Donations were highlighted by a very generous gift of \$1,359 from the BARC COED Softball League, which had ceased to operate. The main fund raising activity this year was the annual poinsettia sale.

Activities supported this year included the Science Enrichment programs at the Beltsville Academy in May by Jim Anderson and Al Stoner and in September with the week-long collaboration with the Maryland Agricultural Education Foundation; the 21st Annual BARC Poster Day April 21; participation in the BARC Field Day June 10; awards presented to winners at middle school science fairs in Howard, Montgomery and Prince George's Counties; special programs at BARC including Women's History Month, Leaders of Tomorrow, grand opening of the Student Discovery Garden, and a reception celebrating J. P. Dubey's election to the National Academy of Science; a recertification site visit at the BARC Animal Care Facility; and an in-depth Laboratory Review (APDL). Administrative expenses were \$1,349, which included the FAR-B annual meeting and luncheon, printing and mailing two newsletters as well as dues notices, post office box rental, postage and supplies. Fund raising expenses were \$734.

Richard Zimmerman, Treasurer

Kids Explore Agricultural Science On Wheels

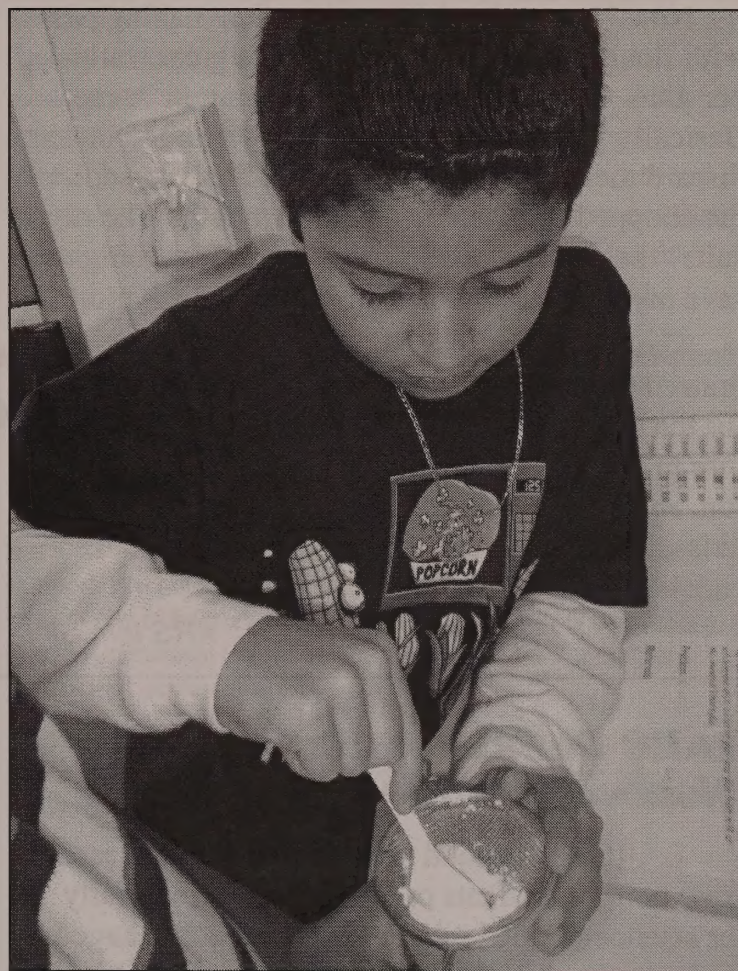
Ahhh! Remember the days of taking classroom field trips? Bet you never had one like this—a virtual visit by a classroom on wheels that drives right up to the school!

Such was the recent treat for K-5 students at Beltsville Academy in Beltsville, MD, just down the road from BARC.

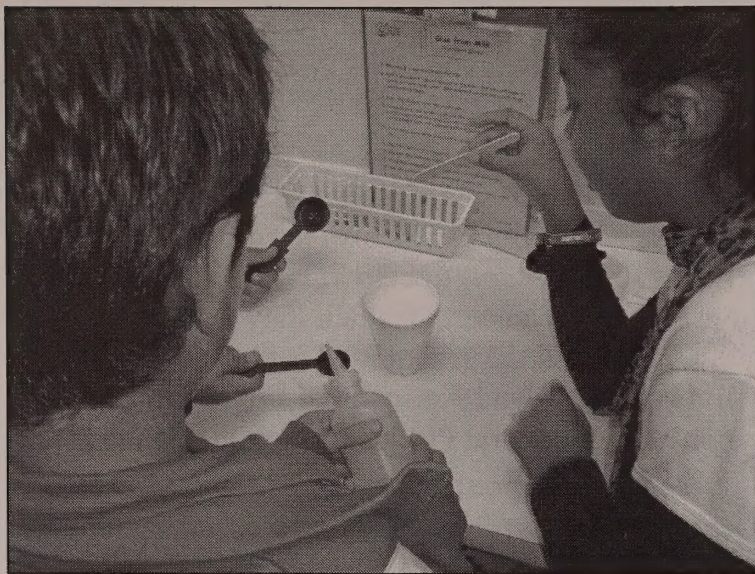
Over the past several years, BARC and FAR-B have coordinated numerous science enrichment programs at Beltsville Academy (formerly Beltsville Elementary School) to help kids learn more about agricultural science. This fall, they teamed up with the school and the school's PTA to sponsor a visit from the Maryland Agricultural Education Foundation's "Agricultural Products" mobile science lab.

Retired science teachers skilled in making science "come alive" promote the importance of agriculture in our daily lives, and conduct experiments featured on the lab's kid-sized workbenches.

Younger students heard a story about cows, talked about dairy foods, made butter from heavy cream ("shaka, shaka, shaka" for an arm-exhausting 10 minutes), and then taste tested their experiment on graham crackers.



Student separates curds from whey.



Young chemists in action.

Older students played “chemist,” producing glue from milk and then testing its strength against a commercial variety using several objective tests. Problem, hypothesis, procedure, results, conclusion—the scientific method in action!

Now I remember having great fun making paste with flour and water—it even makes great wallpaper glue. But this one from milk was new to me. Basically, you separate the curds by adding vinegar, discard the whey, add hot water and baking soda to the chopped curd, then mix until smooth. The results? I overheard a 3rd grader say, “I’m going to save my glue so we don’t have to buy it anymore.”

The school’s principal, Mrs. Rashida Edwards, praised the program. “This was a great experience for the kids. It reinforced the importance of agriculture in our daily lives, showed how science can be fun, and you just never know what might motivate kids—maybe we’ve even inspired some future scientists!” Maybe even some for BARC!

Dianne Odlan, Liaison, ARS Info Staff

BARC Dedicates Student Discovery Garden

BARC has a brand new educational-outreach attraction for students of all ages—but especially for science-minded middle- and high-school aged students. Named the “Student Discovery Garden”, the artfully laid out attraction was opened officially

at a September 8 ceremony attended by BARC Director Joseph Spence, locally based agriculture department officials, FAR-B members, a special BARC task force that planned and created the discovery garden, and, appropriately, a goodly representation of local students, some of them home-schooled.

BARC research plant physiologist Lewis Ziska headed up a special BARC task force on diversity and educational outreach charged with creating the discovery garden. The task force went about its work with several inter-related goals in mind, said Ziska. One goal is to demonstrate the depth and resourcefulness of BARC agricultural research. After all, Ziska says, food doesn’t magically appear on the shelves or in the coolers of supermarkets. Food arrives after great expenditure of hard work and investment. Scientific progress from agricultural research is a central to the food production equation. That is one point for the garden to drive home, he said.

Ziska explained that BARC is following First Lady Michelle Obama’s lead of using a garden as a teaching tool for urban kids. Agriculture Secretary Tom Vilsack has challenged the department to build gardens that help young people understand how hard it is to produce food and yet how much fun



Science and Technology student Adama Ariguzo, of Charles Herbert Flowers High School, checks out the Student Discovery Garden.

PHOTO: JIM PLASKOWITZ, BELTSVILLE AREA TECHNOLOGY SECTION

growing food can be. More, the Secretary says, gardens can encourage young people to become more nutritious eaters.

The student discovery garden features seven sections. Each section displays a special subject of BARC research. Sections have such catchy titles as: Nutrition and Carrots, Birds and Bees in the Garden (Pollination), Native Crops in the Americas, and Urban Gardening (which may mean anything from growing food in containers to window boxes). Each section features a poster providing educational information. A three-foot wide sidewalk permits easy, close-up access to exhibits. The garden is free of pesticides and herbicides. Planting beds contain only sterilized soil, as a protective measure for the middle-school students who are expected to be the predominant age group served by this teaching tool.

One goal, Zizka said, is to recruit young scientists. If the United States is to continue feeding its ever expanding U.S. population--not to mention growing food exports for a hungry world--agricultural research is going to need the best and the brightest scientists. We need to attract interest and commitment while students are young, Ziska said. Studies show that young people begin to sort out their life's goals during middle school. That is a reason why we have specially targeted the student discovery garden toward middle school students, he said.

Another goal is to bring more diversity to agricultural research. BARC Outreach Coordinator Jenny Allen is reaching out to schools with an eye to attracting minorities and other under represented groups to agricultural research. Adamma Ariguzo (see a nearby photo of a smiling Adamma in the Student Discovery Garden) could in a sense be a poster child for future agricultural scientists. At the moment, she is a senior in the Science and Technology program of the Charles Herbert Flowers High School, a comprehensive Prince George's County Science and Technology magnet school in Springdale, Md. Could Adamma Ariguzo become a future Lew Zizka; is she a distinguished agricultural scientist in the making? The fullness of time will answer those questions.

For more information on the Student Discovery Garden, visit BARC on-line at http://www.ars.usda.gov/main/site_main.htm?modecode=12-00-00-00. Click on "Student Discovery Garden," just below the photo of BARC's landmark clock tower building. There you will find Lewis Zizka's full article on the garden. If you should be interested in volunteering to help at the garden, perhaps talk to visiting school groups, check back from time-to-time. BARC has in the works a link that will describe how to pursue volunteer interest. For the present, inquiries may be directed to the National Visitor Center, 301-504-

THANK YOU FAR-B FOR YOUR FINANCIAL SUPPORT

Dear FAR-B membership,

The Beltsville Area Diversity Taskforce would like to extend a sincere "Thank you" for your organization's support of our recent endeavors. Our group has taken on the mission to provide support and leadership to the Beltsville Area Administration to ensure that the research mission of the Agricultural Research Service is preformed at the highest scientific level possible. The creation and maintenance of a workforce that represents the nation's and surrounding community's increasingly diverse population will ultimately aid in the achievement of that goal. We have recently had great success in the implementations of such outreach programs as Cultural Heritage Month celebrations, the establishment of a Student Discovery Garden, and the development of a graduate student symposium which includes

1890 Land Grant Institutions to focus solely on critical agricultural research issues. **FAR-B members** have helped make all of these endeavors successful with their constant support. We anticipate that our efforts will inspire a diverse community of future scientists to see the wealth of possibilities in Agricultural Sciences and FAR-B will be an integral part of that achievement.

We applaud your dedication to promoting the importance of Agricultural Science through outreach. We look forward to future collaborations.

Thanks,

Vernetta L. Gaskins

Beltsville Area Diversity Taskforce, Chair

Plant Sciences Institute / Food Quality Laboratory

9403, e-mail NVC@ars.usda.gov for information. Please include a phone number where you can be reached.

Jim Butcher

IN MEMORIAM

Morton Beroza

Morton Beroza, 93, a retired ARS research chemist who specialized in insect and pest control, died Jan. 12 at the Riderwood Village retirement community in Silver Spring. He had Alzheimer's disease.

Beroza was one of the founders of FAR-B. He was one of six people who signed the Articles of Incorporation of FAR-B on December 2, 1985. When he retired from ARS he came on the Board of Directors in 1983. He served continuously in that capacity until 2007 when he was no longer able to attend board meetings due to the extensive care he provided his ailing wife.

Beroza worked at the USDA from 1948 to 1974 and retired as chief of the ARS Organic Chemicals Synthesis Laboratory. He spent much of his retirement as a consultant to the USDA and companies. Earlier he worked as a Science Aide for the US Food and Drug Administration, Washington, DC (1939 to 1943) and as a chemical engineer for the Naval Ordnance Laboratory in White Oak, Md. (1946 to 1948).

He contributed to hundreds of scientific publications and held 30 patents. In 1997, he was inducted into the ARS Science Hall of Fame, which cited his "international reputation for discovering ingenious and inventive tools for controlling insect pests safely within their ecological domain."

"He developed many environmentally compatible insect control strategies using insect lures, attractants, repellents, and pheromones," the citation added. "Beroza invented analytical techniques and apparatus now used by chemists worldwide."

Beroza was the recipient of many other awards, including the International Award for Research in Pesticide Chemistry from the American Chemical Society, 1977; the Gold Medal award for out-

standing achievement in environmental chemistry from the Synthetic Organic Chemical Manufacturers Association, 1973; the Harvey W. Wiley award in analytical chemistry from the Association Official Analytical Chemists, 1970; an award in Chromatography and Electrophoresis from the American Chemical Society, 1969; the Hillebrand prize from the Chemical Society Washington, 1963; the Distinguished Scientist award from the Friends of Agricultural Research, 1993; and the Sterling B. Hendricks Award from the American Chemical Society and USDA, 1998.

Morton Beroza was a native of New Haven, Conn., and a 1942 chemistry graduate of George Washington University. From Georgetown University, he received a master's degree in chemistry in 1946 and a doctorate in biochemistry in 1950. He was a Navy veteran of World War II.

Survivors include his wife of 64 years, Hannah Hurwitz Beroza of Riderwood Village; two children, Robert "Crispin" Beroza of Boyds and Rosalyn Beroza of Silver Spring; a sister; and five grandchildren.

Manya Stoetzel

Manya Brooke Stoetzel, 70, of St. Leonard and of Summerfield, Fla., died Sept. 13, 2010, at her residence in Summerfield. She was born April 11, 1940, in Houston, Tex., to the late Royce Lynn and Helen Eiker Brooke.

After graduation from Hillcrest High School in Dallas, Tex., she attended Rice University. However, it was at Iowa State University where her formal study of entomology, the study of insects, began. She transferred to Wisconsin State University, River Falls, where she met her husband, Faran Eugene Stoetzel. Mr. Stoetzel accepted a job with Dowell Schlumberger Corp. in 1961 and the newlywed couple moved to Venezuela where their first son, Frank Eiker Stoetzel was born in October 1962.

Returning to the United States, Mr. Stoetzel accepted a job in 1964 for the Bureau of the Census, Commerce Department in Jeffersonville, Ind. Their second son, Kevin Lynn Stoetzel, was born in August 1964 in Ind.

They moved to Maryland where she continued her studies in entomology, receiving her bachelor's degree in 1966, master's degree in 1970 and doctorate in 1972 from the University of Maryland. Her professional career spanned more than 30 years at the ARS Systematic Entomology Laboratory, where she provided systematic research and expertise on a variety of insect groups, including specializing in the biosystematics of aphids. She served as president of the Entomological Society of America in 1996. She was proud to be an entomologist and she met wonderful people during her career, including her mentor Louise Russell.

Since her retirement in 2002, she and her husband split their time between the family beach house they owned since 1976 in Long Beach, and their retirement home in Summerfield, Fla. She loved being a grandmother and spending holidays with her family. She will be remembered as a very loving and giving person who had a great sense of humor.

She is survived by her son, Kevin Lynn of Huntingtown; daughter-in-law, Felicia Marie of Huntingtown; grandchildren, Jack Thomas of Huntingtown and Nick Joseph of Huntingtown; two brothers, James Brooke of Aiken, S.C., and Ronald Brooke of Orlando, Fla.; and several other relatives.

Paul Doraiswamy

Paul Doraiswamy passed away May 8, 2010. Doraiswamy was a Meteorologist with the Beltsville Hydrology and Remote Sensing Laboratory, Animal & Natural Resources Institute, since 1988.

Doraiswamy had an illustrious career with ARS. His work has had a tremendous impact on the utilization of remote sensing research products by USDA agencies, specifically the Foreign Agriculture Service (FAS), National Agricultural Statistical Service (NASS), and the Natural Resources Conservation Service. These agencies are using his research results dealing with crop condition and yield estimation, land use evaluation, and the impact of agricultural management practices on soil carbon

sequestration.

Doraiswamy was recognized internationally as an authority on the application of satellite technology for agriculture. His accomplishments include being one of the first to demonstrate the application of NASA satellite sensor technologies for crop condition and yield assessments and management of nitrogen fertilizer applications. He pioneered procedures for integrating biophysical parameters from satellite images with crop simulation models. Doraiswamy developed an operational Geographical Information System-based algorithm with satellite data to map biweekly changes in crop development and conditions on a regional basis. Doraiswamy's crowning achievement was the development of an operational crop condition and yield modeling system that both FAS and NASS now use as part of their operational programs for assessing corn, soybean, wheat yield and production in the U.S and world-wide.

Doraiswamy had important leadership roles as a member of the USDA Coordination Committee for Remote Sensing and USDA Weather and Climate Coordination Committee. In 1999, he was elected Coordinator for Remote Sensing Activities of the U.N. Commission for Agricultural Meteorology, World Meteorological Organization (WMO), and elected a member of the Database Management Working Group of the U.N. Commission for Agricultural Meteorology, WMO. In 2004 he was awarded the Federal Laboratory Consortium Mid-Atlantic Regional Excellence in Technology Transfer Award for work entitled "A Real Time Assessment System for Spring Wheat Production in Siberia." In 2009, he was again awarded the Federal Laboratory Consortium Mid-Atlantic Regional Excellence in Technology Transfer Award for the work entitled "Development of an Operational System for Regional Crop Production Assessment."

Paul Doraiswamy is survived by his wife, Sundari Doraiswamy, children, Vijay Doraiswamy (daughter-in-law Purvi Doraiswamy), Ranjit Doraiswamy, and Vikram Doraiswamy, his mother, Sarojini Doraiswamy, and his sisters, Melly Swamidas, Rita Das, Marjorie Ebenezzer, Pamela Asthana, and Merlyn Vemury.

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david.chitwood@ars.usda.gov

Special Advisor: **Essex Finney**
eefinney2@msn.com

TO CONTACT THE FAR-B BOARD

Membership: **Allan Stoner**
stonerfam@earthlink.net

Email – *farbboard@comcast.net*

Phone –301-854-9758

CFC: **Lew Smith**
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Website – *http://www.far-b.org*

BARC Alliance Liaison & Community Outreach:
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jim.hickory@verizon.net

BELTSVILLE AREA

Area Director: Joseph Spence

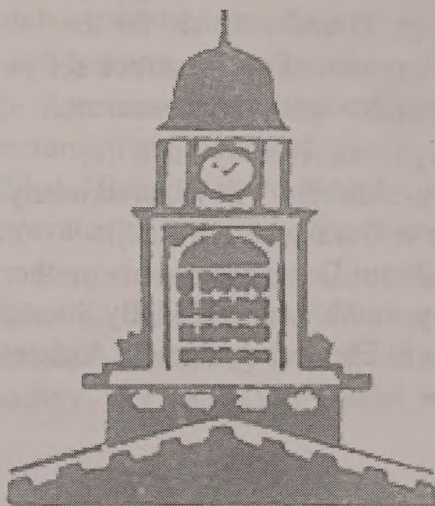
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Friends of Agricultural Research–Beltsville, Inc.
P.O. Box 1061
Beltsville, MD 20705-1061



THE FAR-B NEWS

Dedicated to promoting the research and education programs of the
Henry A. Wallace Beltsville Agricultural Research Center, Beltsville, Maryland

Friends of Agricultural Research-Beltsville, Incorporated P.O. Box 1061, Beltsville, MD 20704-1061

JUNE 2011

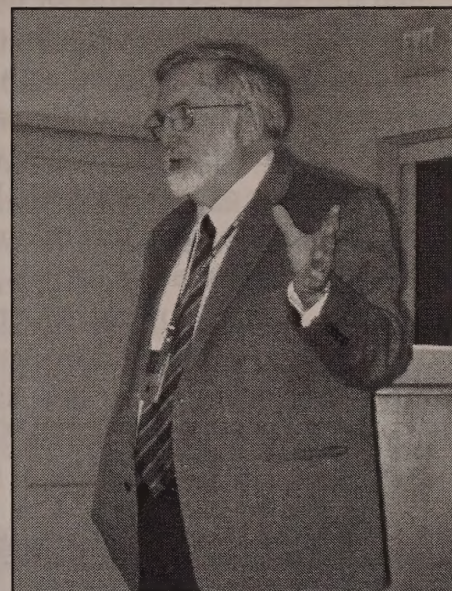
Editor: Hank Becker

President's Message

Dear Friends and Colleagues,

On May 10 the 26th annual meeting of Friends of Agricultural Research – Beltsville was held in the Conference Room of Building 005, BARC-West. The keynote speaker this year was Dr. Caird Rexroad, Jr., Associate Administrator ARS. His talk was titled *Challenging Times at ARS but Research Opportunities Still Knock*. About 50 members and guests were in attendance.

Dr. Rexroad emphasized working with stakeholders because they are ARS's best friends. The stakeholders will go to bat for the research ARS scientists do and the scientists need to keep stakeholders in the loop. Dr. Rexroad also talked a little about the budget and the impact this will have on programs. He does not see the possibility of RIF's and ARS researchers who have lost funding will be moved to other locations. After his presenta-



Dr. Caird Rexroad addresses FAR-B.

Come Join Us on Friendship Day

Meet your friends in FAR-B/BARC

Enjoy some snacks, walk through the extensive garden and just chill out . . .

There will be door prizes!

Sunday, June 26, 2011 • 1:00 – 5:00 p.m.

at the home of: The Hammerschlags

7106 Deer Valley Road, Highland, Maryland 20777 • Phone: 301-854-2674

Off of Mink Hollow Road, between routes 216 and 108 • Please park at top of hill and walk down to house

\$12 donation per person (children under 18 free) • All proceeds to support the 2011 BARC Research Programs

Make checks payable to: FAR-B, or pay by credit card online at: www.far-b.org/friendshipday.html

Send by Friday, June 10, 2011 to:

FAR-B
P.O. Box 1061
Beltsville, MD 20704-1061

Name(s): _____

E-mail address: _____

In lieu of attendance, please accept my donation of \$ _____

Friends of Agricultural Research-Beltsville, Incorporated

tion, there was a very lively discussion between Dr. Rexroad and retired and currently employed scientists.

Dr. Joe Spence made a presentation on what is happening at BARC. More details will be listed below.

At the business meeting of the Friends of Agricultural Research-Beltsville, Incorporated, outgoing president Dr. Pursel opened with a Power Point Presentation about some of the accomplishments of FAR-B. He mentioned that late winter and spring are a busy time of year for FAR-B activities. In February and March, a few of our faithful members and volunteers served as FAR-B judges at area Science Fairs held in Howard, Montgomery, and Prince George's County. This has been one of FAR-B's outreach activities for the past five years. Again this year, FAR-B awarded \$10, \$20 and \$30 gift certificates to 30 Middle School students for their

superior posters.

Other FAR-B activities included: Graduate Student Agricultural Research Symposium – February; BARC Poster Day – Tent and Luncheon – April; Fitness Walk with Student Discovery Garden Season Opener – May; Beltsville Administrative Support Training Session – May; Asian Pacific Heritage Month – May; National Hispanic Heritage Month – September; National Disability Employment Awareness Month – October; American Indian Heritage Month – November; Testimony submitted to U.S. House and Senate Ag Committees in support of increased funding of research at BARC; Financial Support of three FAR-B Summer Internships – \$7,500; Financial Support of plant material Student Discovery Garden; and cash awards to High School Student Interns at BARC Poster Day.

On March 23, Dr. Murrell submitted FAR-B's annual testimony to the U.S. House and Senate Sub-



The 2011 FAR-B Board (left to right) Lew Smith, Phil Kearney, Jim Smith, Secretary Allan Stoner, Vice President Vern Pursel, President Jim Anderson, Freddi Hammerschlag, Treasurer Dick Zimmerman, Dianne Odland, Dave Chitwood, Jim Butcher and Hank Becker.

committees on Agriculture, Rural Development, Food and Drug Administration, and Related Agencies of the Committee on Appropriations. We are once again greatly indebted to Jim Butcher for doing the major work in composing our testimony. This year's testimony request for the Beltsville Agricultural Research Center was in line with Agricultural Secretary Vilsack's request. Please read the complete text of the testimony FAR-B submitted on the web at www.far-b.org/Testimony.html.

Election of new Officers followed. Elected were: President, James Anderson; Vice-President, Vern Pursel; Treasurer, Richard Zimmerman, and Secretary, Allan Stoner.

In closing, Dr. Pursel stressed that if you haven't already done so, please send in your membership dues. Also, don't forget to join us at the FAR-B/BARC Friendship Day on June 26, 2011.

As incoming President, I look forward to serving FAR-B and BARC in the coming years. First, I want to thank all the folks who have supported FAR-B with their generous financial support. With funds coming from membership, CFC, gifts and other sources, FAR-B could not so generously support BARC and its scientists and research programs. FAR-B is looking to add new members to the Board. Please let me know if you are interested. Our next Board meeting is noon, June 14, 2011 at the Log Lodge, National Visitors' Center.

Jim Anderson, President

Area Director's Message

This year has provided a number of surprises and we are only at the half-way point!

First and foremost, as many of you know, Dr. Tom Sexton has retired from ARS after 40 years of Federal service. Tom has left his mark on Beltsville as an outstanding researcher, former Institute Direc-

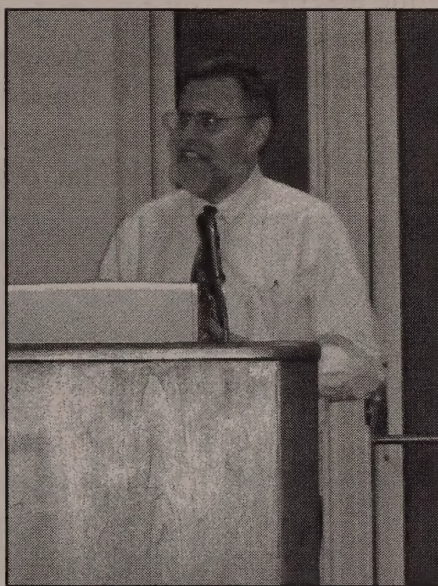
tor and Associate Area Director. He will stay in the area and hopefully will not be a stranger to his many friends here.

The new Director of the U.S. National Arboretum, Dr. Colien Hefferan, has been on board for several months now and she has hit the ground running. One of her first tasks was to deal with a controversy related to the azalea and boxwood collections. She handled that in a way that not only diffused the situation but has led to a new approach to working with stakeholders at the USNA to ensure that the research conducted there can coexist with the need of the public to visit and enjoy that magnificent facility.

Everyone knows that the Federal budget is under close scrutiny and Congress is looking at every possible way to control spending. While few would question the impact and importance of agricultural research and the tremendous return on investment that we provide, the fact is that we are a discretionary activity and not immune from the budget ax. For the current fiscal year, FY2011, ARS suffered a loss of approximately \$44million. Beltsville took its share of the cuts but we were fortunate in that the cuts were based on previously funded Congressional

earmarks and Beltsville had not significantly benefited from that method of funding in the past. In addition to the program losses, the Agency's buildings and facilities account was zeroed out. This did hurt us significantly at BARC. We had money set aside in that account to completely repair our deteriorated steam lines. This was an important project for us that would have not only improved the physical plant but reduced costs.

I am confident that we will get the funds to complete this project at some point but we are facing a significant delay in completion of this important project. If there is good news, it lies in the fact that our projects funded through the economic stimulus funding--most notably the renovation of Building 306 and the administration building at the



BARC Area Director, Joe Spence.

Arboretum--are well underway and the funding is intact. Of note is that we have our first tenants as part of the Enhanced Use Lease Authority that was provided in the last Farm Bill and we hope that that program will grow to allow for better utilization of space at BARC and to provide significant opportunities for new research collaborations.

On top of all this, we had the real possibility of a government shut down until the 2011 budget was finally passed at the eleventh hour. Literally, when people left work on the Friday, we had to have everything prepared and secured for a shutdown. While we were happy to see the shutdown avoided, there was a tremendous amount of planning and effort that diverted us from our research activities. Needless to say, morale suffered but everyone realized it was beyond our control.

On a more positive note, the Secretary has been aggressive in pursuing his cultural transformation initiative for the department. I am pleased to say that Beltsville has and continues to play a leading role in this activity and our student training program, which is a true partnership with FAR-B, has achieved enviable success.

Beyond the current fiscal year, it is anybody's guess as to what might be in store. The administration's budget sent to Congress in February contains cuts to ARS but the Beltsville Area would actually see a significant net increase in funding. I think that this is a reflection of the respect of the quality of the research that is being conducted here and the fact that we leading researchers in many of the priority areas set forth by the Secretary. The House is scheduled to mark up the FY2012 budget just as this newsletter is published, so stay tuned for the latest information.

I very much believe that the uncertainty we face presents unique opportunities for the Beltsville Area. It has forced us to be strategic in our planning

and priority setting. Now is not the time to be reactive and wait for the storm to pass but to be bold and propose new initiatives. We are doing that and will continue to meet any challenge. I think there is no question that we have a solid foundation upon which to build the next 100 years of research to be conducted at BARC.

Joseph Spence, Area Director

22nd Annual BARC Poster Day

BARC Poster Day was held on April 27 with 22 high school interns and 63 Research Associates, Visiting Scientists and new Research Scientist presenting posters. FAR-B once again played a major role in supporting the event by providing the refreshments and lunch for the poster day participant, tent-rental to provide sufficient indoor space for

posters, and presenting cash awards to the top three student intern posters.

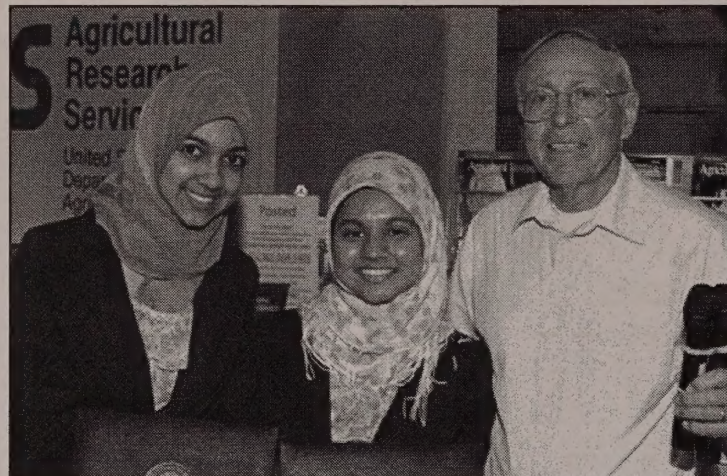
Winners of this year's student intern poster competition were: First Prize (\$300) - *No More Cryin' Over Onions* by Kulsoom Naqvi and Zurana Taluckder from Eleanor Roosevelt High School. Mentor: Dave Luthria, Food Composition and Methods Development

Laboratory, BHNRC.

Second Prize (\$200) – *XRF Measurements of Phosphorus in Corn Leaves* by Kelsey Kanyuck from Eleanor Roosevelt High School. Mentors: Thanh Dao and Guy Stone, Environmental Management and By-Product Utilization Laboratory, PSI.

Third Prize (\$100) – *Effect of Storage Time and Temperature on Boar Sperm Characteristics* by Morolayo Alo and Sierra Hadley from Charles Herbert Flowers High School. Mentor: Dave Guthrie, Animal Biosciences and Biotechnology Laboratory, ANRI.

Vern Pursel, President



First prize winners (left to right): Kulsoom Naqvi, Zurana Taluckder with FAR-B President Vernon Pursel.



Second and third prize winners (left to right): Kelsey Kanyuck, Morolayo Alo and Sierra Hadley.

Financial Report

Again in 2011, FAR-B has a strong financial position enabling it to support an even broader array of activities than last year. To date, support has been provided for middle school Science Fairs in Howard, Montgomery and Prince George's Counties, the 2011 Graduate Student Agricultural Research Symposium, the Beltsville Poster Day, new plantings in the Student Discovery Garden (SDG), the International Food Festival and Fitness Walk held in conjunction with the opening of the SDG and a special program for Asian Pacific Heritage Month. Several additional programs organized by the Beltsville Area Diversity Task Force this year have been approved for support, as has the Science Enrichment Program at Beltsville Academy. In addition, FAR-B is supporting three interns for research programs this summer, one in each Institute at BARC.

Federal employees, mainly at BARC, have significantly increased support to FAR-B through CFC, with the campaign in fall 2010 the most successful to date. Through the end of April, income from dues is slightly lower so far than in 2010, but income from other categories is up. We trust that all current members will renew their memberships in the next few months. In any case, FAR-B will have sufficient income and reserves to support all programs planned for this year.

Richard Zimmerman, Treasurer

Plan to Attend Friendship Day on June 26

After a successful poinsettia plant sale in December 2010, plans to raise funds for FAR-B include a second FAR-B/BARC Friendship Day gathering at the home of BARC retiree, Dr. Freddi Hammerschlag on Sunday, June 26, 2011 from 1 to 5 p.m. The cost for adults is \$12 per person and children under 18 are free. All proceeds will support the BARC Research Programs. Again, this event not only aims to raise funds but also to promote stronger ties between BARC employees and FAR-B members. You can download the flyer and send a check by mail or pay by credit card online at: www.far-b.org/friendshipday.html. Note that in lieu of attending Friendship Day, you can make a donation to FAR-B.

FAR-B will also sponsor another poinsettia sale in December with reminder notices going out sometime in August/September.

Please support FAR-B by attending Friendship Day and/or by purchasing poinsettias! Many thanks in advance for your support and thanks to all of you who have supported us in the past!

Freddi Hammerschlag, Fundraising Chairman

Mobile Science Lab Returns in Fall

For nearly a decade, FAR-B and BARC have sponsored a Science Enrichment Program at Beltsville Elementary School—now called the Beltsville Academy. We provided in-class and in-gym programs for several years, then progressed to a unique field trip experience on the school's own tarmac—a mobile Science Laboratory developed by the Maryland Ag Education Foundation (MAEF) that features kid-sized work benches and equipment where students perform experiments using scientific method. The classes are led by a retired science teacher skilled in making science come alive.

Plans have been completed to partner with MAEF again this fall for the return of their "Agricultural Products" laboratory. Funding for the week-long program will be shared by FAR-B, the

Beltsville Academy, and the school's PTA.

Please consider donating an hour or two to assist the teacher supervise students during their science enrichment classes. Contact Dianne Odland at dianne.odland@ars.usda.gov and she will keep you posted on open dates and times.

Dianne Odland, Liaison, ARS Info Staff

IN MEMORIAM

Walter A. Gentner, Jr.

Longtime FAR-B member and weed scientist Walt Gentner died on Friday, April 15. Walt worked for 38 years as a plant physiologist for the Department of Agriculture at the Beltsville Agricultural Research Service. Walt served as president of the North Eastern Weed Science Society from 1974 to 1975. He was an expert on the effect of weed herbicides in corn production and published many articles in this and other weed science publications. He is survived by his wife Evelyn Gentner and many friends. A memorial service was held at the Borgwardt Funeral Home, 400 Powder Mill Rd., Beltsville, MD, on Thursday April 28 from 6 to 8 p.m. where a memorial service was held at 7 p.m. He was buried at Fort Lincoln Cemetery at a later date. Memorial contributions may be made to your favorite charity.

IN MEMORIAM

Vernon Pursel

Vernon George Pursel, 74, of Highland, Maryland died surrounded by family on May 27, 2011 at 6:51 pm in Olney. He had been hospitalized two days earlier after choking on food, which resulted in a loss of oxygen and significant brain damage.

Vernon was born on November 11, 1936 in Yer-

ington, Nevada, the youngest son of Ralph and Gertrude Pursel. Growing up on a working farm, Vernon was an excellent student, displaying both intellectual curiosity and a passion for animals. He graduated from University of Nevada, Reno in 1958 with a Bachelors of Science degree in animal science. He later earned a Masters of Science in 1961 and a Ph.D. in animal physiology in 1965, both from the University of Minnesota, St. Paul.

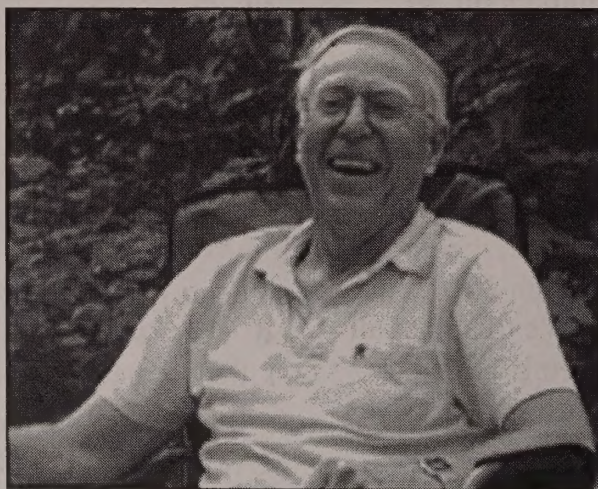
Vern joined the Air Force Reserves in 1962 and worked for 9 months as a meat inspector for the U.S. military in Alsace-Lorraine. He spent his career working as a research physiologist for the U.S. Department of Agriculture, most notably at the Beltsville Agriculture Research Center in Beltsville, Maryland. His contributions to animal agriculture were recognized by his receipt of a USDA Superior Service Award, a USDA Distinguished Service Unit Award, the ARS Distinguished Scientist of the Year Award, the ASAS Physiology and Endocrinology Award and the ARPAS DC Chapter Distinguished Service Award. Highly accomplished during his career, he was admitted into the Agricultural Research Services (ARS) Science Hall of Fame in 2006.

Since retiring in 2002, Vernon has kept busy with such varied activities as serving in leadership roles for the Friends of Agriculture Research – Beltsville, mentoring younger scientists, website development, being a best friend and companion to his wife, tending an ambitious garden, scouring for deals on timeshares, always being there for his two

sons and their families, watching his grandchildren grow and flourish, being good company to family and friends, traveling to vacation destinations in Virginia, Idaho, and Mexico, and planning new adventures.

Vernon is survived by his beloved wife Gertrude (Louise) Riedel, sons Tim and Brad, daughters-in-law Natalie and Julie, step-children Sebastian and Alexander, grandchildren

Ainsley and Ethan, brother Melvin, and sister-in-



laws Olive and Madeline.

Other survivors include numerous beloved nieces and nephews, including Cheryl, Darrell, Karen, Loren, Jan, Stanley, Tom, and Vicki. A lifelong animal lover, Vernon is also survived by his devoted canine companion and biggest fan, Wilbur. Last but not least, Vernon is survived by friends and former colleagues too numerous to name. Vernon's other two brothers, Claire and Lynn, previously died many years ago due to complications from Hunting-

ton's Disease. His remains will be cremated. A tribute/celebration of his life will be held at a later date, which we think he would have liked very much. Vernon will be dearly missed, but he will not be forgotten.

In lieu of flowers, donations may be made to the Huntington's Disease Society of America <https://www.hdsa.org/donations.html> or to the Friends of Agricultural Research-Beltsville, Inc. <http://www.far-b.org/donations-bequests.html>.

Memories of Vern

Our thoughts and prayers are with retired FAR-B President Vernon Pursel and his family.

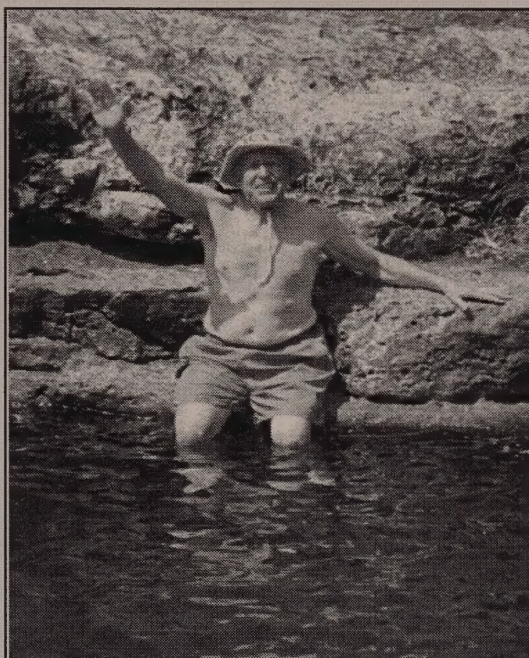
Vern's close friend and former FAR-B president Bill Wergin had these words to share regarding his memories of Vern.

"As we all know, Vern spent his professional career working with pigs. Consequently, my wife and I were always on the lookout for "pig gifties" to remind him of his vocational love. Through the years we bestowed upon him and Louise pig-lawn ornaments, salt shakers, Christmas ornaments, placemats, corn holders, paper weights and key-chains. Vern proudly displayed many of these items at their mountain house at Bryce, Virginia which contained dozens of pig-related items that he had received from his many friends around the world.

Vern was a frugal man. About four years ago my wife and I were thinking about giving up our skiing activities, which were rather expensive and risky for older individuals. However, at the same time Vern turned 70 and found out that individuals who had reached that age could ski free--so he took up the sport.

One of Vern's favorite sayings was "Don't spend

a quarter when a nickel will do." A couple of years ago he called me to say that there was a timeshare, listed on eBay, in Merida, Mexico--a



Vern at cenote in Dzibichaltun.

beautiful city in the Yucatan that was conquered by the Spanish in the 16th Century. The eBay listing was for \$1.00 and he asked if I would be interested in splitting the price. I agreed. We paid a bit more than a dollar but did become proud owners of a 2 bedroom timeshare in a 5 star hotel 2 blocks from the central square in Merida. This past spring Vern, Louise, my wife and I spent a week at our timeshare in Merida--visiting the city highlights and the surrounding Mayan ruins. We visited Dzibichaltun, a word we took great pride in pronouncing once we learned

how. Dzibichaltun was a major Mayan city dating back to 700 AD. This archeological site contained a cenote--a freshwater, spring fed sinkhole that the Mayans had used for drinking and irrigation. Tourists were allowed to enter the cenote, but of the four of us, only one person was brave enough to swim in this ancient site. Since I had passed on this unique opportunity, Vern requested that I take his picture. We shall long remember the week we shared together."

Jim Anderson, President

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janderso1@mac.com

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peachnfrog66@comcast.net

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vpursel@comcast.net

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Treasurer: **Richard Zimmerman**
rhz1415@verizon.net

Liaison with ARS Information Staff:
Dianne Odland
dianne.odland@ars.usda.gov

Secretary: **Allan Stoner**
stonerfam@earthlink.net

Liaison with BARC:
David Chitwood
david.chitwood@ars.usda.gov

Special Advisor: **Essex Finney**
eefinney2@msn.com

Membership: **Allan Stoner**
stonerfam@earthlink.net

TO CONTACT THE FAR-B BOARD

Email – farbboard@comcast.net

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BELTSVILLE AREA

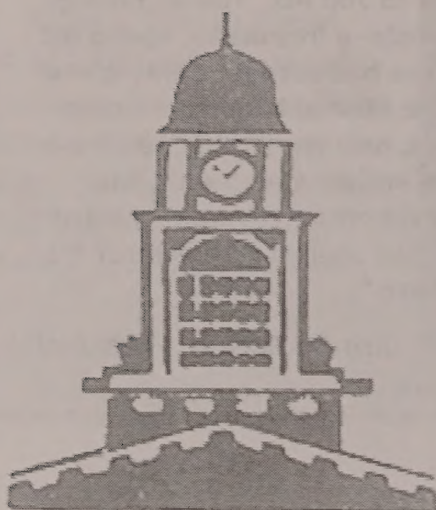
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JANUARY 2012

Editor: Hank Becker

President's Message

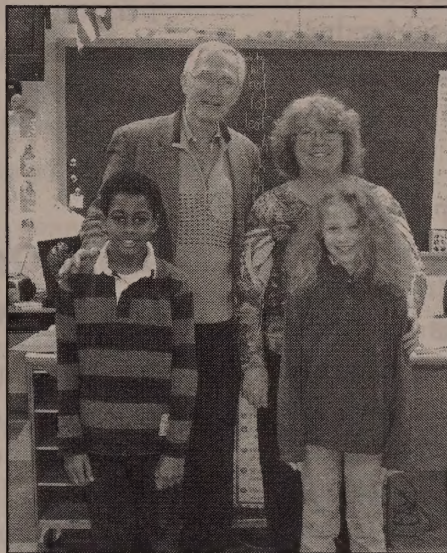
Dear Friends and Colleagues,

First I want to wish all a very healthy and prosperous new year. I know 2012 will be challenging.

At the January 10, 2012 meeting of the FAR-B Board of Directors we decided to continue the FAR-B Summer Internship program. In this program, FAR-B will provide funding in the amount of \$2,500 each for 4 summer interns awarded to a permanent scientist in each of the Institutes/Centers located at BARC. A committee composed of three scientists within each Institute/Center will evaluate the applications and select the applicant they believe will provide a student intern the best opportunity to interact and learn about agriculture research in a laboratory setting. It is our sincere hope that these internships will be provided meaningful research experiences for academically promising high school senior or college students so that they will consider science/agriculturally-related careers when they complete their formal education.

FAR-B co-sponsored numerous major events at BARC this past year. This included the support of the Beltsville Area Diversity Taskforce which included Beltsville Area Graduate Student Agricultural Research Symposium held February 10-11, 2011, and six meeting throughout the year. In addition, FAR-B handled the registration for the Plant Germplasm Operations Committee meeting held at BARC June 21-22, 2011; the BARC-UMD Fall Symposium - Trends in Agriculture—October 20, 2011; and the BARD Workshop "Micorarrays and Next-Generation Sequencing for detection and Identification of Plant Viruses - November 17-19, 2011. For a complete list of activities FAR-B sponsored, visit our website: www.far-b.org.

FAR-B members will again be judging Middle School



Beltsville Academy student Samantha Finazzo and Aaron Barnes with FAR-B President Jim Anderson and Ms. Riffe at Aggie Poster Awards ceremony. Samantha and Aaron are the 2nd and 3rd place poster winners; Ryanna Naithram (the 1st place winner) was out sick that day.

Science Fair projects in Montgomery, and Prince George's Counties on March 17, 2012. Judging Middle School Science fairs has been one of our outreach activities for the past six years. There are lots of very bright boys and girls at these science fairs, and we believe our small cash awards and certificates helps keep them interested in science. If you are interested in helping out, please call or send me an email. We can use your help, and I guarantee you will enjoy discussing the projects of these young students.

The science trailer from the Maryland Agricultural Education Foundation will be coming back to the Beltsville Academy under the sponsorship of FAR-B. FAR-B, along with the school and the PTA will sponsor the trailer this coming fall.

FAR-B will again be hosting the luncheon for the BARC Poster Day (April 19, 2012) and presenting awards to the top three posters presented by the High School Interns that are working in various BARC laboratories. This year the winner will be awarded the **Vernon G Pursel Student Scientific Achievement Award**.

In May, we hope to see you at the FAR-B Annual Meeting.

In closing, please remember that it's time to send in your membership dues, which are quite essential for FAR-B to continue our support of various activities at BARC. In 2010, FAR-B received the most contributions from CFC since FAR-B started to participate in the CFC. FAR-B thanks all federal employees who contributed so generously. There were 58 employees, including 35 anonymous and 2 who gave unknown amounts. **THANK YOU!**

Jim Anderson, President

You've got to pay your dues (for 2012) . . . If you want to get the news!

Area Director's Message

Best wishes to all for a productive and rewarding 2012. For the Beltsville Area, this past year could best be characterized as a year of change. This change was reflected in the turnover of personnel in the office, a hiring freeze that was put in place, reductions in travel, and a significant reduction in the size of the Area office. I think many of these changes, while difficult to deal with initially, will ultimately be beneficial.

Across ARS, change has also been prevalent. All of the Area offices have seen their staff size decrease and there is implementation of service centers to carry out administrative functions across the Areas. The budget of ARS was reduced approximately \$39M in FY12 and ten locations were closed out entirely and the staff at those locations will be offered a reassignment elsewhere in the agency. To accommodate and pay for these relocations, positions throughout the agency were frozen and an early out/buy out program was offered to employees. In the Beltsville Area, there were 35 employees, including 9 SY's, who took advantage of these retirement incentives. Beltsville was fortunate in that none of the cuts in program were from here. I think this is a reflection of the high regard for the research program being conducted here. However, we will pick up a number of the employees who were displaced from the ten locations that were closed out. I think this will work out well for us and we will welcome these new employees. They are a group of very talented, productive and hard working employees who have much to offer the Beltsville Area.

On the facilities side, we look forward to the completion of our major building projects in 2012 that were funded through the government stimulus program. These two projects, Building 306 on BARC-East and the Administration Building at the U.S. National Arboretum are ahead of schedule and look great. They will be definite assets to the Area.

I would like to think that the past year was an anomaly in terms of change and that we will be entering a period of stability. But, I know that is just

wishful thinking and that more changes are likely. I think that as we look to the future, we can be optimistic that no matter what changes might be in store for us. This past year has shown us that change can be beneficial and that we can rise up to meet the challenges that change brings.

I continue to be optimistic about our future and I am sure that with the continued support of FAR-B, we will have a great year ahead of us.

Joseph Spence, Area Director

Dianne Odland Retires from ARS Information Staff

Analyzing the chlorophyll/vitamin content of green veggies; developing food money management/nutrition education materials; evaluating consumers' home fridge/pantry contents during a cross-country food makeover tour; traveling to Hollywood to appear on the "Home Show;" conducting roach races at the FFA (Future Farmers of America) Career Show; and coordinating programs to help kids learn about agriculture. How varied can a career be? AND, how much fun are public servants allowed to have?

Such has been the rewarding career of Dianne Odland, first at the University of Maryland where she received a graduate degree in food science, then during nearly 40 years of Federal service starting at USDA's Consumer and Food Economics Institute and culminating at ARS' Information Staff from which she retired just a few weeks ago.

Dianne joined the Information Staff in 1994 where "outreach" became her forte--enthusiastically promoting ARS research, mainly through exhibiting at professional and educational conferences. AAAS or the National Cattlemen's Beef Association--whatever the conference--chemists, entomologists, dietitians, or science teachers--whatever the target audience--"hands-on" was always her approach to engage conferees and help them learn about the agency--Super Slurper demos, the unforgettable cockroach races, sunbutter tasting, and supermarket

-sized shopping carts stuffed full of ARS-developed technologies, for example.

Closer to FAR-B's heart, for nearly a decade, Dianne served as the Board's "Outreach Advisor" and helped coordinate a number of all-school science enrichment programs at Beltsville Academy, FAR-B's "adopted school." Science in your Shopping Cart, Making Healthy Food Choices, Exploring Animal Science, Exploring Plant Science, Exploring Environmental Science, and Chemistry in Everyday Life were some of the featured themes.

"Our goal was always to provide meaningful and memorable educational experiences for kids to help them connect agriculture to their everyday lives. The more interactive, the better, because that's how most kids learn best. Plus...it makes learning FUN! We always relied heavily on BARC staff to help bring their science alive. What an experience for the kids to meet "real" scientists and learn about what they do!"

A few years ago, Dianne initiated FAR-B's partnership with the Maryland Ag Education Foundation to arrange mobile science laboratory visits to the school. A retired science teacher presents an agriculturally relevant lesson and then supervises experiments using the scientific method. Last fall's program included a lesson on pizza ingredients for the younger children and an egg inspection activity for older students. The program always gets rave reviews from both the teachers and students and includes numerous lesson options, so it's on schedule again for next fall. Cost of the lab's week-long visit is shared by FAR-B, the school, and the school's PTA. FAR-B members, BARC staff, and PTA members help the teacher coordinate the lab experience. Dianne looks forward to helping with next fall's visit.

Dianne Odlan, Liaison, ARS Info Staff

Financial Report

In 2011, FAR-B had income of \$39,732 and expenses of \$27,693 for a net of \$12,039. The main sources of income were: dues (\$4,229), Combined Federal Campaign (\$9,234), donations (\$3,849),

interest and dividends (\$3,503), fund raising activities (\$1,350) and workshops and symposia (\$17,541 minus \$8,232 expenses to date). Donations were high this year because of the Vernon Pursel Memorial Fund. Income from dues was down 5% from 2010, but from CFC was up 50%. Fund raising activities were the annual poinsettia sale and the FAR-B Friendship Day in June. Expenditures by category were: research (42%), education (39%), outreach (12%), fund raising (2%) and administration (5%).

In 2011, FAR-B funded three high school student interns at BARC as well as again supporting the following activities: science enrichment program at the Beltsville Academy in October in conjunction with the Maryland Agricultural Education Association, BARC Poster Day, awards at middle school Science Fairs in Howard, Montgomery and Prince George's Counties and Beltsville Area programs organized by the Diversity Task Force, including the Student Discovery Garden. FAR-B assisted in organizing the Plant Germplasm Operations Committee meeting in May, the BARC-University of Maryland Symposium in October and the BARD workshop on use of microarrays for detecting plant viruses in November.

Richard Zimmerman, Treasurer

Fundraising

Friends of Agriculture – Beltsville (FAR-B) held its 6th poinsettia plant sale in Fall 2011 and again our plants were purchased from Homestead Gardens. Notices were sent out to all FAR-B members and to Beltsville Agricultural Center (BARC) employees in September and October for the poinsettias. Pick-up was held at BARC-West Building 011A on Tuesday, December 13, 2011. The cost of each poinsettia was \$14.00 and 64 plants were sold. The money collected from the poinsettias has gone into a FAR-B fund to support BARC scientists. Many thanks to all of you who supported the plant sale. We hope to do this again next year and welcome any thoughts you may have about this event. We also welcome any suggestions for other fundraising events.

Freddi Hammerschlag, Fundraising Chair

Beltsville Academy Hosts Maryland Agriculture Mobile Science Lab

The Beltsville Academy, with underlying financial and hands-on voluntary help from FAR-B and the school's Parent Teachers Association, hosted a week-long visit by the Agricultural Products Mobile Science Lab, from October 24 to 28. Each day, students visited the lab to complete hands-on scientific investigations related to the vital role agriculture plays in their daily lives. To assure linked educational value, each investigation is carefully matched to the Maryland Voluntary State Curriculum. Each investigation takes 30-to 40-minutes per class to complete. Five to six classes can visit the lab during the course of the school day.

Before the week is over, every class—kindergarten through grade five—will visit the lab. Inside, students will meet their Lab Instructor—former Prince George's County special education teacher Carolyn Menne.

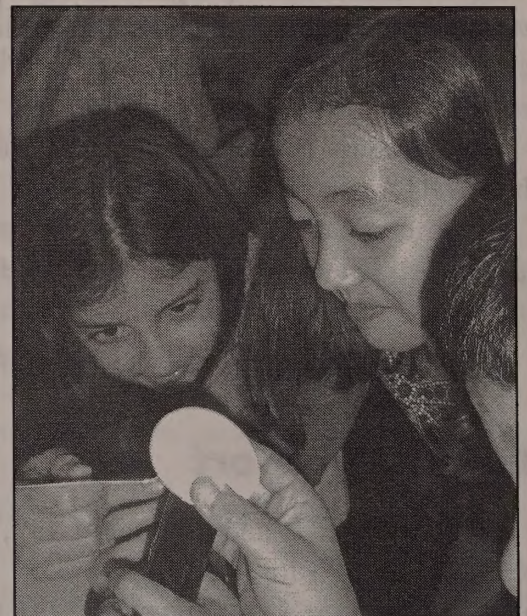
Mrs. Menne will describe the scientific

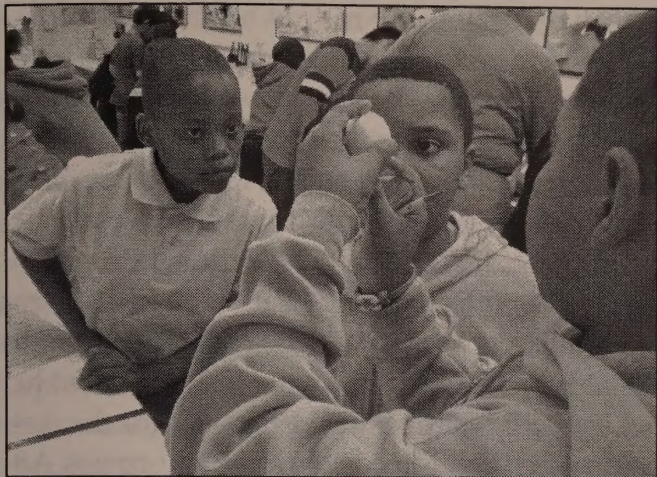


Beltsville Academy kindergarteners check out images of ripening corn, scrumptious-looking pepperoni pizza, and more as they prepare to enter the mobile science lab.

method, illustrating core principles with examples of hypothesis, procedures, observations, and conclusion drawing. She will talk students through the agricultural sources of pizza ingredients, or how to grade and candle an egg.

Jim Butcher,
Community Outreach

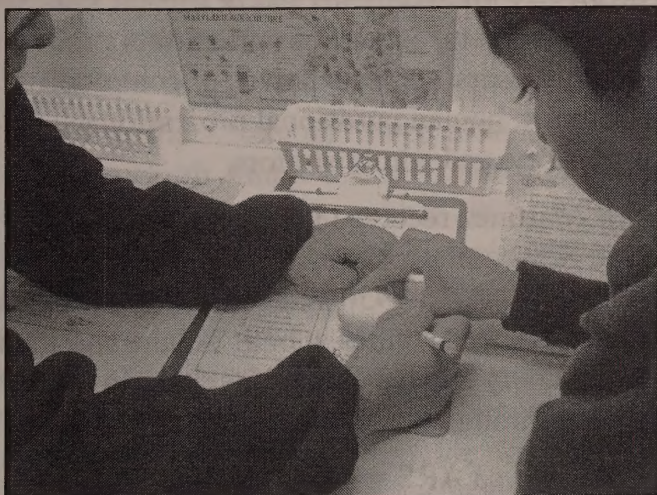




These Beltsville Academy elementary students (Grades 3–5) take part in an “Eggciting Eggs” activity at the Maryland Agricultural Education Foundation's Ag Products Mobile Science Lab.



Students act as egg inspectors after they have learned how to identify and label the parts of an egg. In these photos, students are candling, weighing and measuring eggs and inspecting them for freshness.



IN MEMORIAM

Joseph J. Higgins

Joseph J. Higgins of Rockville, MD died on Thursday, January 12, 2012. Joe was in the unit at BARC that did plant exploration and then later he was in the unit that handled plant patents when it was located at NAL. Joe was a veteran of World War II. He was a photographer in the Navy, including aerial photographer. He attended Paint Branch Unitarian Church.

Born in Washington, DC on Aug. 3, 1924, he is the father of Jay Stephen Higgins of Englewood, FL, Jenny Mason of Rocklin, CA, Jody Higgins of Frederick, MD and Louise Singer of Williamsburg, VA. Dr. Higgins is also survived by his eight grandchildren and by his longtime loving companion, Diane Lewis. Service will take place at Arlington National Cemetery at a later date.

Wendell H. Headley

Wendell Headley died on January 20. During his ARS career, he managed Range 2 greenhouses at BARC during the 1970's and 1980's. He retired from ARS around 1988. Wendell is survived by his wife Trudy of 58 years who worked at the ARS RPES office and his son Alan Headley and daughter Kara Kehrner. He was buried on January 25 at Baldwin Memorial Methodist Church Cemetery, Millersville, MD.

Robert Perdue

Robert E. Perdue Jr. 86, a retired ARS botanist who helped conduct research into the use of cancer-treating medicines died July 20 at Suburban Hospital in Bethesda after a stroke.

Jim Perdue moved to the Washington area in the early 1950s and worked for the U.S. Geological Survey where he helped map vegetation in China, India and Thailand.

He joined USDA in 1957 to work for ARS in Beltsville. In 1960, he worked in cooperation with the National Cancer Institute to help procure plant samples to be tested for use in anti-cancer drugs.

After retiring from ARS in 1989, he started his own company that helped develop plant crops in Latin America. Beginning in 2006, he served as a consultant to HeteroGeneity—a private firm that promotes the use of plants in foods and pharmaceuticals.

Robert was a Norfolk, VA native and a 1949 botany graduate of the University of Maryland. He received his master's degree in 1951 and a doctorate in 1957--both in botany—from Harvard University.

He served as an officer in the U.S. Army's 101st Airborne Division during World War II. He was shot in the knee during combat and later suffered a shrapnel wound from a land mine in Germany. His military decorations included the Bronze Star Medal and two Purple Hearts.

In 2010, he self-published a book on the Office of Strategic Services, the wartime forerunner of the CIA and its WWII operations in Greece.

His first marriage to Gloria Pugh ended in divorce. Survivors include his wife of 35 years, Georgia Persinos Bergstrom Perdue of North Bethesda; three children from his first marriage—Robert E. Perdue III of Falling Waters, WV, Susan Sherwin of Alfine, UT, and Holly Boyle of Church Hill, MD; 10 grandchildren and nine great-grandchildren.

Jim Elgin

James Hansford Elgin, Jr. died on Tuesday, December 13, 2011 on his family farm in Rocky Ridge, MD. He dealt with Alzheimer's for many years following his retirement. Jim will be cremated and then buried in the family plot in Woolwine, VA by the Methodist church his grandfather built. Additional details will be available after the holidays.

Jim received his BS and MS from the University of Maryland in College Park, MD. Beginning in 1961, Jim worked part-time on alfalfa research at the Beltsville Agricultural Research Center while a student. Jim continued his research on alfalfa at Penn State University where he received his Ph. D in 1969. He then move across the country and began his professional career with the USDA-ARS at

Prosser, WA conducting research on stem nematode resistance of alfalfa. He moved back to Beltsville in 1974 where he became the alfalfa breeder in the Field Crops Lab. In 1981 he was selected as the Research Leader for the Germplasm Quality and Enhancement Laboratory and in 1986 he became the first Institute Director for Plant Sciences Institute at BARC. Jim became the National Program Leader for Forage and Range Research in 1987 and served in that capacity until his retirement from the USDA-ARS in 1998. Following his retirement he served as the Executive Vice President for the Association of Official Seed Certifying Agencies Advisory Committee for 3 years.

Jim had published 145 research publications in the area of alfalfa genetics, breeding, pathology, and entomology and was extremely knowledgeable of a wide spectrum of forage species. He received major awards from his peers as a Fellow of the Crop Science Society of America, The American Society of Agronomy and an Honorary Member of the North American Alfalfa Improvement Conference. After his retirement he settled into a new home which he built for his wife, Margaret (Peggy) Heflin, and himself on his family farm in Rocky Ridge, MD. Jim will be truly missed as he was always the eternal optimist seeing the good in all the people he met.

Wilda H. Martinez

Wilda H. Martinez passed away at her home in Abita Springs, LA, on Sunday, July 24, 2011. She will be greatly missed by her many friends, colleagues, coworkers, as well as agricultural producers and processors, representatives of commodity organizations, human nutritional professionals, university faculty, and administrators.

Mrs. Martinez received her BA in Chemistry from the Newcomb College, Tulane University in New Orleans, LA, in 1950 and continued her education with advanced studies at both Tulane and Iowa State University and her thirst for scientific knowledge through on-the-job opportunities.

Wilda served ARS without interruption since 1954 until her retirement in the November

2007. Over half a century distinguished career with the Federal Government brought considerable recognition to her and ARS. As a research scientist at the Southern Regional Research Center in New Orleans, she used basic tools in chemistry and biochemistry to assess the safety and utility of cottonseed protein products to find alternative uses of cotton byproducts. In 1975, she joined the Office of National Programs (ONP) as a National Program Leader for Marketing and Processing of Field Crops—the first woman to serve on that staff--and subsequently she advanced to the position of Associate Deputy Administrator for Agriproducts and Human Nutrition in 1992. She was a visionary leader and strong advocate of both basic and applied research and possessed a keen sense of the role of scientific research in solving day-to-day problems in agriculture. While in the ONP she was a strong advocate for food quality and safety--like pathogen and mycotoxin--research, and human and animal nutrition--phytase and cut fruit research. Her leadership in these areas facilitated ARS finding concrete solutions to daily problems affecting ARS customers and stakeholders. She championed large scale effort to limit the aflatoxin contamination of Arizona cotton production. The other example of Mrs. Martinez visionary leadership was her contribution to assembling an inter-departmental collaborative research team charged with developing the *Tilletia controversa* Kuhn (TCK) Pest Risk Assessment Model. The development and then acceptance of this model by the People's Republic of China, Mexico, Brazil and India has been crucial to eliminating an embargo of U.S. wheat imports by these countries.

In 1997, Mrs. Martinez moved to Philadelphia, PA, first as the Acting and since 1998 as the Director for the North Atlantic Area--a position she held until her retirement in November 2007. As the NAA Director, she led a multidisciplinary team, organized into 21 Research Management Units and located in 12 States from Maine to West Virginia. Wilda placed an extremely strong emphasis on refocusing programs based on customer needs and insisting that these projects provide practical solutions to their problems. She was instrumental in bringing several programs to national and interna-

tional recognition with the USDA Robert H. Holey Center for Agriculture and Health in Ithaca, NY, and the Genomics Laboratory in the Jean Myer USDA Human Nutrition Research Center on Aging in Boston, MA, serving as prime examples. Also, she oversaw the expansion of research that included three new programs: the National Center for Cool and Cool Water Aquaculture in Leetown, WV; the National Cold Water Marine Aquaculture Center in Orono, ME; and the Grape Genetics Research Unit in Geneva, NY.

During her career, Mrs. Martinez has been recognized as a leader, a team member, and an outstanding mentor for new scientists and a strong advocate for the training of our future leaders. She was respected and admired both nationally and internationally by her peers and colleagues. Her achievements are many and substantiated by the numerous awards she received: the USDA Superior Award in 1972 and 1982; the Federal Woman of the Year Award in 1975; two Presidential Rank Meritorious Awards in 1997 and 2005; recognitions from the National Association of Wheat Growers Foundation for Outstanding Contributions to the Expansion of Wheat Utilization in 1989; recognition from the American Bakers Association, National Association for Wheat Growers and Millers National Federation for her contribution to wheat, flour and end products quality research; USDA Group Honor Award for Excellence, *Tilletia controversa* Kuhn Pest Risk Assessment Task Force; and others. She was elected a Fellow, American Association for the Advancement of Science in 1987.

Wilda was very demanding of herself and worked tirelessly with great enthusiasm and dedication. She also was demanding of those who worked with her, but she was very fair. She was an avid reader and had broad interests that in addition to science included literature, music, arts, and history. She constantly acquired new knowledge and skills that allowed her to grasp and understand new and emerging issues in science. Most of all, however, she was a warm, kindhearted individual whose only expectation, also for herself, was that we all continue to do the very best work that makes ARS proud. She will be greatly missed.

BOARD OF DIRECTORS

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janderso1@mac.com

Fundraising: **Freddi Hammerschlag**
peachnfrog66@comcast.net

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kdmurrell@comcast.net

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rhz1415@verizon.net

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jdmowder@yahoo.com

Secretary: **Allan Stoner**
stonerfam@earthlink.net

Liaison with BARC: **David Chitwood**
david.chitwood@ars.usda.gov

Special Advisor: **Essex Finney**
eefinney2@msn.com

Membership: **Allan Stoner**
stonerfam@earthlink.net

TO CONTACT THE FAR-B BOARD

Email – *farbboardod@yahoo.com*

Phone – 301-578-4098

Website – *http://www.far-b.org*

CFC: **Lew Smith**
lws406@comcast.net

BARC Alliance Liaison & Community Outreach:
Jim Butcher
jim.hickory@verizon.net

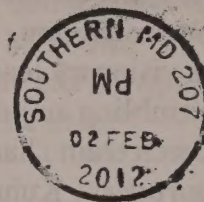
BELTSVILLE AREA

Area Director: **Joseph Spence**

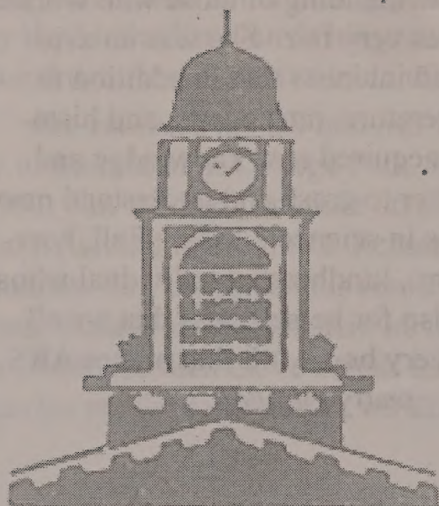
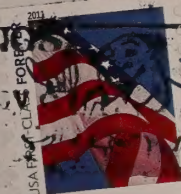
Publicity: **Hank Becker**
hankbecker3@verizon.net

First Class

Friends of Agricultural Research–Beltsville, Inc.
P.O. Box 1061
Beltsville, MD 20705-1061



GREETINGS
FROM
Far Far Away



Dr. Essex E. Finney, Jr.
11206 Chantilly Lane
Mitchellville, MD 20721



THE FAR-B NEWS

Dedicated to promoting the research and education programs of the
Henry A. Wallace Beltsville Agricultural Research Center, Beltsville, Maryland

Friends of Agricultural Research-Beltsville, Incorporated P.O. Box 1061, Beltsville, MD 20704-1061

JUNE 2012

Editor: Hank Becker

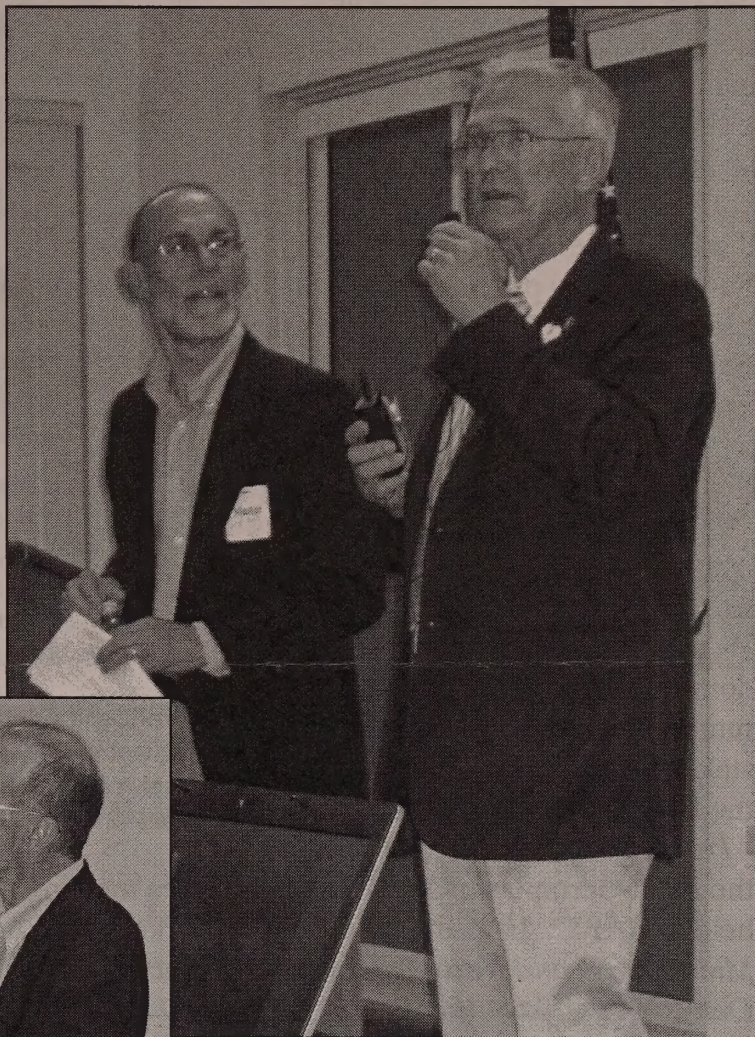
President's Message

On May 15, 2012, FAR-B held its Annual Meeting. There were roughly 40 members and visitors in attendance. We were privileged to have Mr. Jeffrey Mervis, Deputy News Editor from *Science* Magazine as out speaker.

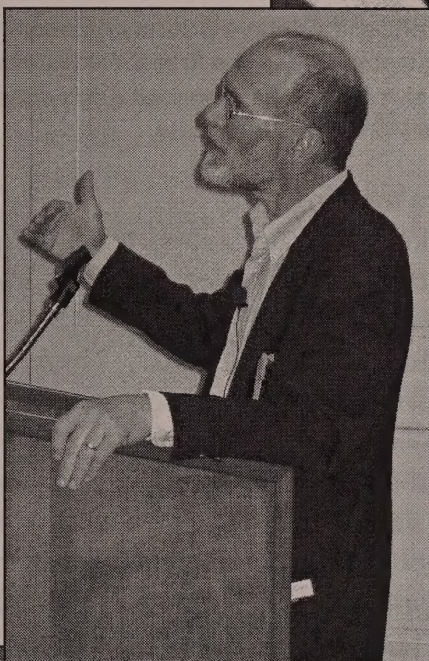
Mr. Mervis talked about *The Science Budget: The Big Picture, and What it Could Mean for Agricultural Research*. He made the point that there is no big science budget as such, rather budgets for research comes from individual Departmental budgets, e.g., ARS and NIFA in the USDA budget, NIH in the Department of Health and Human Services, etc. It was clear that Congress must act to develop a fix for the Budget Control Act of 2011, which calls for a mandatory \$1.2 trillion reduction. Half would come from the military budget and the other half from the rest of the budget--not including Social Security, Medicare and Medicaid. He did not know how much this would affect ARS and BARC.

After his presentation, Mr. Mervis opened his talk for discussion. After about 20 minutes of questions and answers, I had to cut off the discussion because our speaker had to leave for other appointments.

Dr. Joe Spence, Area Director, talked about BARC. His comments are summarized in his section of the



(Top) FAR-B President Jim Anderson (right) introduced Jeff Mervis at the Annual Meeting.



(Center) Jeff Mervis, Deputy News Editor of *Science* addressed members of FAR-B at the Annual Meeting.

(Bottom) About 40 FAR-B members and visitors attended the 2012 Annual Meeting.



newsletter.

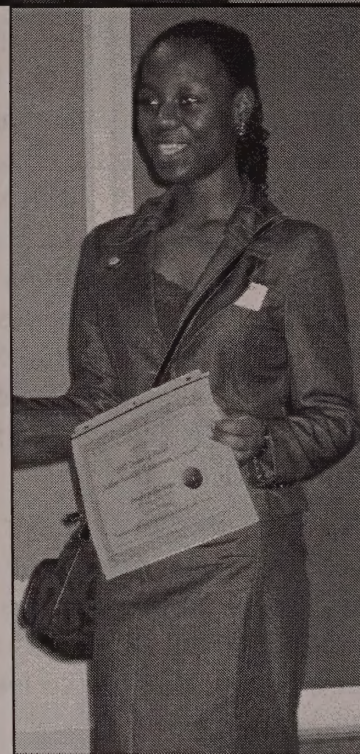
After Dr. Spence spoke, I opened the business meeting. I must admit that FAR-B has had a very busy year in 2011. I summarized major efforts of FAR-B that includes: Cosponsoring the Maryland Agricultural Education Foundation Science Trailer to enhance the Science Program of the Beltsville Academy (formally known as the Beltsville Elementary School) with the School and PTA; Supporting the Beltsville Area Diversity Task Force monthly programs including the Student Discovery Garden; Provided funds for lunch for the BARC Poster Day participants and the cash awards to the top three winners of the High School Posters on work done at BARC; Partially funded four student interns to work in BARC Laboratories in 2011 and in 2012 fully funded four interns; Helped purchase signage for a scientist doing research at the National Arboretum; Provided funds for lunch for a stakeholders outing; Helped sponsor the first BARC-UMD Fall Symposium –*Trends in Agriculture*; Helped with the Plant Germplasm Operating Committee meeting held at BARC; helped with a BARD Workshop *Microarrays and Next-Generation Sequencing for Detection and Identification of Plant Viruses*; Judged Middle School Science Fairs for Montgomery, Prince George's and Howard Counties; and provided gift cards to the three first place winners in biology, natural resources and ecology, and medicine and microbiology in each County for a total of 27 awards.

Also, again this year one of the major efforts of FAR-B is to present testimony to the U.S. House of Representatives and the U.S. Senate in support of the research effort at BARC. I thank Mr. James Butcher for the tremendous amount of work he put into developing this document. This testimony can be found on our web site under Congressional Testimony (www.far-b.org). In our presentation, we



FAR-B President Jim Anderson presents Tolulope Adetayo, C.H. Flowers High School senior, with her certificate as the first place winner of the Vernon G. Pursel Student Scientific Achievement Award for her prize-winning poster.

Tolulope Adetayo proudly displays her certificate. She is the first awardee of the Pursel Award. She also won a full scholarship to Princeton University.



supported the President's budget for Agriculture, ARS and BARC. There are slated increases for environmental stewardship; crop breeding and protection; animal breeding and protection; food safety; and human nutrition--all of which are encompassed at BARC. While not in the budget, we asked for funding to renovate Building 307.

At the Annual Meeting, I made the presentation for the first *Vernon G. Pursel Student Scientific Achievement Award*. This award was proposed by the Board of Directors of FAR-B to be given to the BARC Poster Day High School Winner. It was

made possible by the contributions in memory of Past FAR-B President Vern Pursel upon his untimely death in 2011.

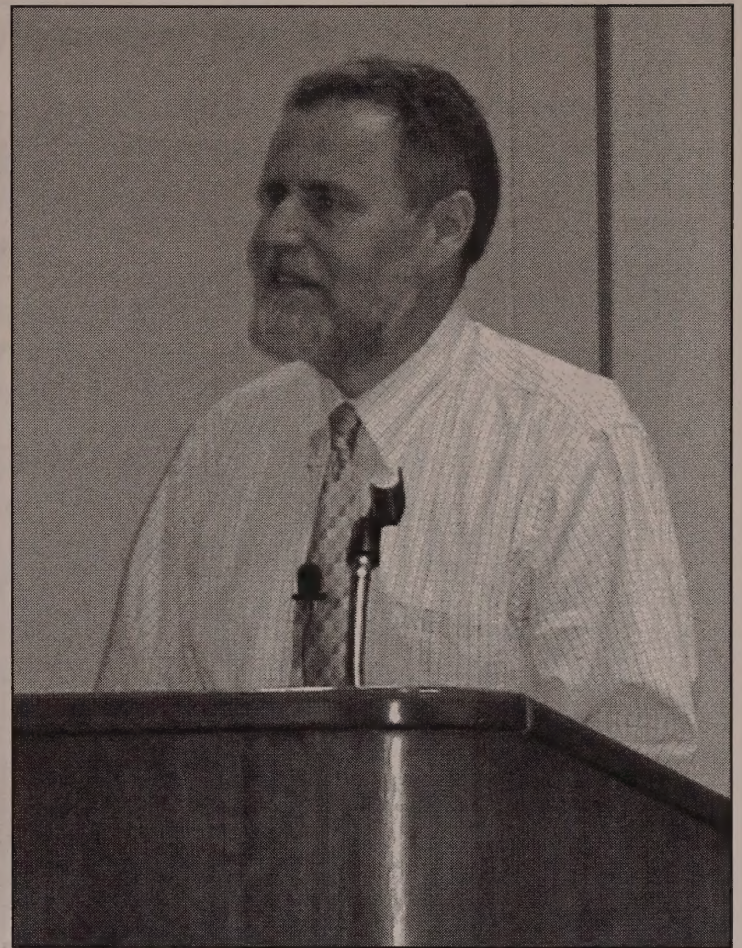
The 1st place winner of the high school posters was a young lady from the Charles Herbert Flowers High School, Tolulope Adetayo. Her project was *Evaluating Cover Crop Performance in Pennsylvania Counties*. Her mentor was Dan Hively of the Hydrology and Remote Sensing Laboratory, ANRI. Ms. Adetayo was presented a certificate. She won a scholarship to and will be attending Princeton University in the Fall 2012. Second place went to a young lady from Oxon Hill High School, Kanisha Ferguson. Her project was *Spotted Pink Lady Beetle Coleomegilla maculata: The Effect of Diet Switching*. Her mentor was Donald Weber from the Invasive Insect Biocontrol and Behavior Laboratory, PLI. Third place went to another young lady from Oxon Hill High School, Rachel Jones. Her project was *Mustard Seed Meal Applied As a Soil Amendment: Phytotoxicity to Tomato*. Her mentor was Susan Meyer of the Nematology Laboratory, PSI.

The purpose of the Annual Business Meeting is not only to let members know what was accomplished, but also to let them participate in choosing leaders and changing By-Laws--so as to keep up with technology needed to carry out essential business. One item of business was to elect new Members of the Board of Directors. Jimmie Mowder was unanimously approved for membership on the BOD's. Also, K. Darwin Murrell was unanimously elected the Vice President. This was followed by a discussion concerning amendments to the FAR-B By-Laws. After the discussion, the proposed changes were unanimously passed by those voting members present.

Funding for all these activities comes from membership dues and contributions. I encourage all BARC employees to join FAR-B as Associate Members. All retired employees are welcome to become members and Patron members.

The annual meeting adjourned to a luncheon and a lot of informal discussion.

Jim Anderson, President



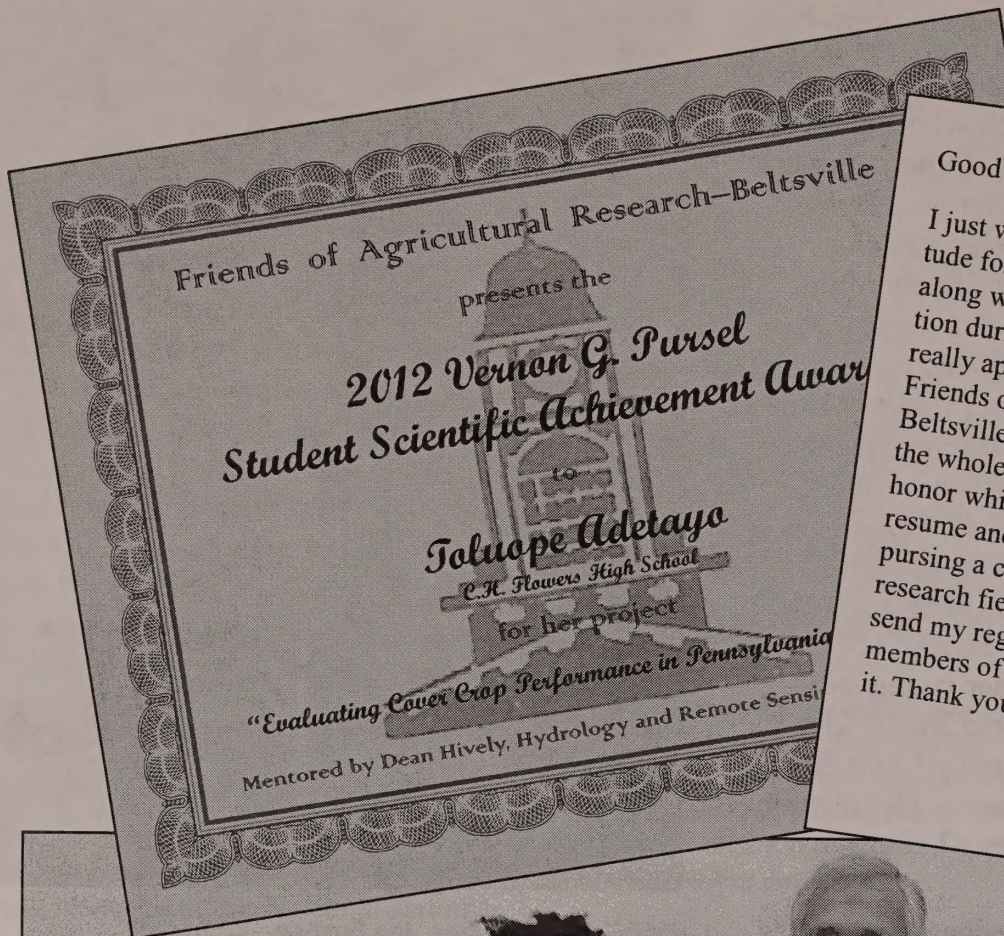
BARC Area Director, Joe Spence.

Area Director's Message

I am pleased to note that despite all the challenges of the past year, the Beltsville Area (BA) continues to do very well.

Although we have been able to fill critical positions, the hiring freeze for most positions remains in force and once lifted, we have many important positions to fill. We have already started the process to begin the recruitments. With the close out of 10 locations in ARS, BA will be the home for a number of outstanding new employees and we will welcome them in the next few weeks.

Building 306, which was renovated using stimulus funds was completed ahead of schedule and will soon be occupied. The building will provide quality research space for a number of our research units and, most importantly, it will allow us to continue to consolidate our facilities in the 300 area on



Good Evening Dr. Anderson,

I just want to express my sincerest gratitude for the Vernon G. Pursel award along with the cash award and recognition during the USDA-ARS poster day. I really appreciate the effort and time Friends of Agricultural Research-Beltsville (FAR-B) contributed toward the whole process. I am very excited of honor which really helps improve my resume and adds to the motivation of pursuing a career in science and in any research field I decide to work in. Please send my regards and appreciation to all members of FAR-B!! I really appreciate it. Thank you very much!!! Take care.

Sincerely,
Tolulope Adetayo



(Left to right) The 2012 Vernon G. Pursel Student Scientific Achievement Awardees — Rachel Jones (Third Place); Tolulope Adetayo (First Place); and, Kanisha Ferguson (Second Place), with President Jim Anderson at the BARC Poster Day for high school seniors.

BARC-East. This consolidation of space has really paid off in terms of keeping utility costs down.

This has resulted in a significant reduction in IRC costs for the next fiscal year; in fact, we have been able to reduce IRC costs by almost \$800,000 – this is money that will remain in the research program.

As I write this, we are in the final stages of negotiations with a new Director of the Beltsville Human Nutrition Research Center. We have several outstanding candidates apply for the position and we hope to have someone on board this summer. At the same time, we were sorry to see Dr. John McMurtry leave the Animal and Natural Resources Institute to become Associate Director of the ARS Southern Plains Area. We wish John well and we owe tremendous thanks to Drs. Ellen Harris, Morse Solomon, and VR Reddy for filling in to provide the leadership needed to their respective institute and center.

The big question on the horizon is the status of the FY2013 budget. The President's budget, released in February, calls for an increase in funding for the Beltsville Area. At the same time, it calls for the redirection of funding for one of our labs, the Food Quality Lab, to be redirected to other research areas. At this time, the Senate has gone on record as not supporting any of the redirections in the President's budget. The final outcome remains to be seen but in any event, all of the potentially affected employees at Beltsville could be accommodated here if it came to that.

I suspect there will be a great deal of uncertainty with regard to the budget for a considerable period of time. On top of that, we have the 2012 elections that will have to play out. If you are the type of person who handles uncertainty well, you will enjoy the next few months. If you are someone who does not handle uncertainty well, my best advice is to not worry about it. I am convinced that as long as we carry out the best research program that we can with the resources that we have available, we will continue to do well in the Beltsville Area.

Joseph Spence, Area Director

Financial Report

Again in 2012, FAR-B has a strong financial position. Based on the surpluses in 2010 and 2011, the Board decided to spend more on BARC program support this year than the anticipated income. Even with a planned deficit, FAR-B reserves will exceed \$60,000 at the end of the year. To date, operating income has been \$10,770 with the main sources being the Combined Federal Campaign (\$6,138), dues (\$3,635) and donations (\$971). The Board trusts that those members who have not yet renewed their membership for 2012 will do so within the next few weeks.

Major expenses to date include funding for four student interns this summer (\$18,400), BARC Poster Day (\$1,863), middle school science fairs in Montgomery and Prince George's Counties (\$372), and administrative expenses (\$829), which includes the January newsletter and copying and mailing the revised By-Laws to all voting members. In addition, payments totaling \$3,900 were made to cover the final bills from the BARC-UM Symposium of last October and the BARD workshop of last November.

Richard Zimmerman, Treasurer

IN MEMORIAM

James L. Hourrigan

James L. Hourrigan, 94, a USDA veterinarian who retired in 1980 died on March 27 at Inova Fairfax Hospital from pneumonia, chronic obstructive pulmonary disease and heart disease. His death was confirmed by his step-daughter Jacqueline Craven.

Dr. Hourrigan's government career spanned nearly 40 years mostly at the USDA. He specialized in infectious diseases of animals including bovine disease. He was a native of Langston, Kan., and had 1940 graduate of Kansas State University's College of Veterinary Medicine. During World War II, he served in the Army Veterinary Corps in Europe as a meat and animal inspector. After the

war, he served in the Army Reserves and retired as a colonel in 1973.

His first wife, Florence Judd Hourrigan, who he married in 1945, died in 1960. Their son, Joseph F. Hourrigan, died in infancy in 1949. His second wife, Louise Craven, who he married in 1970, died in 2006. He is survived by two step-daughters, Sharon Kinzer of Vienna, and Jacqueline Craven of Schenectady, N.Y. and a sister.

David R. Lincicome

Dr. David Lincicome was born on January 17, 1914, and died on March 9, 2011, at the age of 97. Dr. Lincicome and his late wife, Dr. Margaret "Peg" Stirewall, were founding members of The Virginia State Dairy Goat Association and over the years supported the association with their participation and generosity. Dave and Peg were known across the country for their Frogmoor herd of Nubian Dairy Goats that they maintained at their Frogmoor Farm in Virginia. They were the first honorary Life Members of VSDGA and the first recipients of the Friends of VSDGA award.

Dr. David R. Lincicome and Dr. Margaret S. Lincicome recently established the Harley Jones VanCleave Professorship in Life Sciences through a bequest. This professorship honors Dr. VanCleave, distinguished service professor of zoology at the University of Illinois from 1911 to 1953 and a leader in the field of parasitology.

As a tutorial student under the direction of VanCleave, David completed his BS and MS degrees in zoology in 1937 from UIUC. He earned a PhD in tropical medicine from Tulane University School of Medicine, New Orleans, in 1941. David and Peg were both involved with teaching and research in parasitology and tropical medicine, David as a graduate research professor mentoring more than 25 masters and doctoral students and Peg as a Naval Medical Officer at the Naval Medical Research Institute; both have received numerous awards and honors. David founded and was long-time chair of the Editorial Board of *Experimental Parasitology* and also founded the international scientific jour-

nals of *Virology*, *International Review of Tropical Medicine*, and *Advances in Veterinary Sciences*. Since their retirement they were active in the conservation of rare domestic animal breeds and have been long-time breeders of Jacob sheep, Tunis sheep, Pygmy goats, Nubian goats, and soft-coated Wheaten Terriers.

James G. Hartsock

James G. Hartsock, 86, died Monday, November 29, 2010, at Miami Valley Hospital. He was born April 13, 1924 in Columbus to George E. and Nelle (Garwood) Hartsock and grew up on a farm surrounding what is now Pondview Park in Kettering.

He graduated Fairmont High School in 1942, and Ohio State University in 1949. He served in the U.S. Army in the Pacific during World War II, remained in the Reserves following the war, and was recalled to active duty in the U.S. Air Force for the Korean War. He was employed 34 years as an agricultural engineer by the U.S. Department of Agriculture, including many years as the Area Director for the USDA Agricultural Research Service in West Lafayette, IN.

Jim was loyal member of many associations, both formal and informal, including lifelong membership in Sugar Creek Presbyterian Church, and almost 60 years in the American Society of Agricultural and Biological Engineers. In addition to his church, Jim's generosity extended to more than eighty charitable organizations.

Quiet and modest, a self-described "curmudgeon," he showed steadfast loyalty to friends, family, and community, and he will be sorely missed. He was predeceased by his parents, treasured aunt Helen Hartsock, half-brother Robert E. Hartsock, and devoted cousins Nellie Hartsock and Edna Earle Weld. He is survived by his sister-in-law, Elizabeth H. Hartsock, nieces Carol Hartsock Dye and Mary E. Hartsock, and nephew James H. (Colleen) Hartsock, all of California. He is also survived by five grandnieces/nephews, three great-grandnieces/nephews, treasured Garwood cousins, and many loyal friends.

A Memorial Service (and reception following) was held on Saturday, January 8, 2011, 11:00 a.m. at Sugar Creek Presbyterian Church, 4417 Bigger Road, Kettering, Ohio. In lieu of flowers, memorial gifts may be made to: Sugar Creek Presbyterian Church (address above); American Red Cross Schaller Runners Fund, c/o Walter Schaller, 241 East Schantz Ave., Dayton OH 45409; or, the American Society of Agricultural and Biological Engineers, 2950 Niles Road, St. Joseph, MI 49085.

Thomas J. Army

Dr. Thomas J. Army departed this life on Sunday, May 20, 2012, at the age of 88. Dr. Army had been dealing with health issues in recent years and was recuperating from a fall at the time of his death. The memorial service for Dr. Army was held on Thursday, May 24, 2012 at 4:00 p.m. at Horan & McConaty Funeral Home, 7577 W. 80th Avenue, Arvada, CO, 80003.

Dr. Army received his B.S. and M.S. degrees in Agronomy and Botany at the University of Massachusetts, and a Ph.D. degree in Agronomy at North Carolina State University. As a Federal researcher, Dr. Army gained wide recognition in the field of dryland agriculture and the interrelationships of weather and crop production. His industrial work was related to direction and management of research related to production of food and fiber, manufacturing of agricultural chemicals, and food processing.

Assignments took him to numerous foreign countries, including Japan, Korea, Sudan, South Africa, Europe, Thailand, Iran, Eastern Europe, and the Caribbean. Condolences can be addressed to Mrs. Pat Army, 2791 Berry Ln., Golden, CO 80401.

Sheldon Reiser

Sheldon Reiser, former Chief of the Carbohydrates Nutrition Laboratory, Human Nutrition Center, U.S. Department of Agriculture, died on Satur-

day, May 19, 2012, Beloved husband of the late Hildegard R. Reiser; devoted son of the late Joseph and Rae Reiser; loving father of H. Joseph (Janice) Reiser and Christa (Kenneth Wilson) Reiser; grandfather of Jason and Gregory Reiser and Devin Wilson; great-grandfather of Ella and Claire Reiser. Interment was private. Memorial contributions may be made to Disabled American Veterans, or, The ASPCA.

Dr. Sheldon Reiser published research in the 1980's demonstrating that dietary sugar plays a major role in blood cholesterol levels. His research, back in 1983, showed that processed-carb intake raises LDL and triglyceride levels.

In 1976, the U.S. Select Committee on GRAS (Generally Recognized as Safe) substances gave their findings on the health aspects of sugar as a food ingredient. The report states that except for dental cavities, there is no clear association between sugar and health problems such as vascular disease, degenerative disease or diabetes in this country. A rebuttal was finally printed in the *American Journal of Clinical Nutrition* by Sheldon Reiser of the U.S. Department of Agriculture. He stated that the incubation time for people from primitive countries for developing degenerative conditions is 20 years. You cannot do a one year research project and find the answer. The incidence of diabetes becomes very high in certain cultures when the intake of sugar is introduced. Sucrose alone may be a very important etiological factor in heart disease and diabetes. So, Reiser recommended that sugar be decreased by 60 percent and replaced by complex carbohydrates from vegetables and cereals.

In a study he published in October 1996, *Sugar is Not Just Empty Calories*, Dr. Reiser proved that blood fats went up significantly when diets were laden with processed foods and sugar. If you have chronic high blood pressure, you may be motivated to change your diet. A study of 4,225 people published in the *American Journal of Epidemiology* found that sugar may contribute to mild memory loss. (Also published in *John Hopkins Medical Letter, Health After 50*—May 1994.)

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stonerfam@earthlink.net

CFC: **Lew Smith**
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jim.hickory@verizon.net

Publicity: **Hank Becker**
hankbecker3@verizon.net

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TO CONTACT THE FAR-B BOARD

Email – farbboardod@yahoo.com

Phone – 301-578-4098

Website – <http://www.far-b.org>

BELTSVILLE AREA

Area Director: Joseph Spence

First Class

Friends of Agricultural Research–Beltsville, Inc.
P.O. Box 1061
Beltsville, MD 20705-1061





THE FAR-B NEWS

Dedicated to promoting the research and education programs of the
Henry A. Wallace Beltsville Agricultural Research Center, Beltsville, Maryland

Friends of Agricultural Research-Beltsville, Incorporated P.O. Box 1061, Beltsville, MD 20704-1061

JANUARY 2013

Editor: Hank Becker

President's Message

Finally, we have the Presidential election year behind us. As we go to press however, the Country still faces the fiscal cliff on January 1, 2013. If this happens, the Beltsville Area will lose 7.8 percent of the current budget. Let's hope that Congress and the White House can come to an agreement to prevent this possibility.

At the December 11, 2012 meeting of the FAR-B Board of Directors, a budget was passed for 2013. This included funding four summer high school interns (\$4,600 each) for the Beltsville Area. The Area office will have a call for proposals from the permanent SY's and a committee will select the top four proposals to fund. It is our sincere hope that these internships will provide meaningful research experiences for academically promising high school or college students so that they will consider science or an agriculturally-related career when they complete their formal education. This year's budget is a negative one again—we will be spending more than we take in. We seem to follow the Federal Government way of spending with the exception that we do have a little surplus. We anticipate an operating income of \$10,400 with operating expenses of \$30,600. The difference will come out of our reserve funds. We are always hopeful that we will get more members and donations so that we can limit the use of our reserves.

FAR-B co-sponsored numerous major events at BARC this past year. This included the support of the Beltsville Area Diversity Taskforce which included eight meeting throughout the year (see their report below). Also, we supported the Student Discovery Garden which had over 1000 visitors this past year. For a complete list of activities FAR-B sponsored, visit our website: www.far-b.org.

For the second year, FAR-B helped sponsor the Beltsville – University of Maryland Fall Symposium Trends in Agriculture held at the National Wildlife Visitor Center. The title this year was *Feeding the next two billion people – A role for advanced genetic technology*. About 150 attended.

Once again a group of FAR-B members will be judging Middle School Science Fair projects in Howard, Montgomery, and Prince George's Counties.

Unfortunately, Howard County was left out in 2012. Judging Middle School County Science Fairs has been one of our outreach activities for the past six years. There are lots of very bright young women and men at these science fairs, and we believe our small cash awards and our certificates help keep them interested in science. We give

awards in three areas; Environmental Science, Biology, and Microbiology and Health. Each category awardees receive a first (\$30), second (\$20) and third (\$10) place gift card and a certificate. Last year we gave out 18 awards. If you're interested in judging these young developing scientists, please call or send me an email. We can use your help. And I guarantee you will enjoy visiting with these youngsters as they talk about their projects.

In April, FAR-B will again be hosting the luncheon for the BARC Poster Day and presenting awards to the top three posters presented by the High School Interns who are working in various BARC laboratories. The top award is the **Vernon G. Pursel Student Scientific Achievement Award**.

The science trailer from the Maryland Agricultural Education Foundation will be returning to the Beltsville Academy under the sponsorship of FAR-B. FAR-B, along with the school and its PTA will again sponsor the trailer in the fall of 2013.

**Renew Now!
FORM ON BACK
Happy 2013!**

In closing, please remember that it's time to send in your FAR-B membership dues. They are very essential for FAR-B to continue our support of various activities at BARC. In 2012, FAR-B was not included in the Combined Federal Campaign (CFC)--our biggest single source of income for FAR-B. We were just informed that the CFC application was just submitted.

Wishing you all a great New Year!

James Anderson, President

Area Director's Message

As I write this, as all Americans are I am mindful of the looming budget crisis; there is a lot of uncertainty associated related to our fiscal future. At the same time I am convinced that the research that is conducted in the Beltsville Area is and will continue to be recognized as among the very best. I continue to believe that this recognition is our strongest argument for continued support for our programs.

This past year has been a very successful one for us. Building 306 has been fully renovated into a state-of-the-art facility and is occupied by the Bee Research and Bovine Functional Genomics Labs. Congressman Hoyer was able to attend the rededication of the building and he saw first-hand some of the facilities needs that still exist at Beltsville. The Administration Building at the US National Arboretum is about to be re-occupied following a much needed and well executed renovation.

We are delighted that Dr. John Milner has become the Director of the Beltsville Human Nutrition Research Center. His enthusiasm and scientific leadership has already been apparent at BHNRC. In October, we had a large reorganization in the Beltsville Area with the formation of the Beltsville Agricultural Research Center. This reorganization will foster interdisciplinary research, streamline the organization, and make the structure of the Beltsville Area more in line with the other Areas in ARS. In a short period of time, Drs. Wanda Collins and Morse Solomon were able to begin the implementation of the reorganization. Dr. Collins retired at the end of 2012 and we owe her a debt of gratitude for her

leadership of the Plant Sciences Institute and the new BARC. Dr. Solomon will become the Assistant Director of BARC and he will be joined by Dr. Steven Shafer as Director and Dr. Ellen Harris as Associate Director. This is group of leaders from different backgrounds and I think they will form a dynamic leadership team for the new Center. In the past year, we have also had the formation of the Business Service Centers in ARS. While there have been some growing pains associated with this loss of some of our personnel, I think that Beltsville has been fortunate in having some very capable people assigned to service us.

In the past year, the Beltsville Area has enthusiastically received a number of employees who were reassigned from other Areas. We are happy to have them join us and they have added significantly to our research capabilities. Unfortunately, we along with all of ARS have been under a hiring freeze that limited our ability to fill all but the most urgent of positions. I am afraid that even though the positions are starting to be filled, it will be some time before we are fully staffed. In the meantime, it is not uncommon to see many of our employees in every job category taking on extra duties and doing more than one job. While this is not desirable way of doing business, it clearly is a testament to the dedication of our employees and their appreciation of the importance of the research that we conduct.

Despite the uncertainties, I look forward to the coming year. I truly believe we have a solid foundation of world-class research ongoing in Beltsville and are on the right track for continuing to build on that foundation. As always, we view FAR-B as our partners in this endeavor and I am sure I speak for everyone at Beltsville in thanking the members of FAR-B for their support.

Joseph Spence, Area Director

Financial Report

In 2012, FAR-B had operating income of \$20,027 and expenses of \$37,318 for a net loss of \$17,291. The main sources of income were Combined Federal Campaign (\$6,138), dues (\$4,182), donations (\$2,539), interest and dividends (\$1,680)



THE FAR-B NEWS

Dedicated to promoting the research and education programs of the BELTSVILLE AREA, Beltsville, MD

Friends of Agricultural Research-Beltsville, Incorporated P.O. Box 1061, Beltsville, MD 20704-1061

JUNE 2013

Editor: Hank Becker

President's Message

Dear Friends and Colleagues,

The Annual Meeting of Friends of Agricultural Research – Beltsville was held May 14, 2013 in the Conference Room of Building 005, BARC-W. The keynote speaker was Dr. Joseph Spence, Director of the Beltsville Area. He talked about the opportunities Beltsville Area scientists are facing in the BA. Following Dr. Spence's presentation there was a very good discussion. Dr. Spence's summary will be presented below.

During the rest of the meeting, I gave a Power Point presentation on the various aspects FAR-B is



Collene Harding receives the 2013 Vernon G. Pursel Student Scientific Achievement Award from President Jim Anderson.

doing to help the BA. Some of these items are covered in different section of this News Letter and can be seen on our web site: www.far-b.org. One of the highlights was presenting the **Vernon G. Pursel Student Scientific Achievement Award** to Ms. Collene Harding, from the Charles Harper Flowers High School. The title of her project was 'The Effects of Rye and Vetch on Biomass and Nitrogen Intake.' Ms. Harding will be attending the University of Pittsburg, majoring in Chemistry. Her mentor was Dr.

Dean Hively, Hydrology and Remote Sensing Laboratory. Dr. Hively is an outstanding mentor. He was the mentor of last year's winner, as well as the mentor for one of this year's second place winners. FAR-B congratulates Dr. Hively for his outstanding development of young scientists. A huge thank you to Adrienne, Catherine, Mary and Terri for managing the reception area for the last 10 years! Each event gets better and better! We could not do this without each of you.

The beginning of 2013 has been busy for FAR-B. We started the new year with the decision to fund five student interns for the summer of 2013. The following scientists or laboratories have been awarded interns, funded by FAR-B: Jo Anne Crouch, Systematic Mycology; Susan Meyer, Nematology; Matt Greenstone, Invasive Insects; Dave Guthrie, Animal Biotech; and one in SEL. These SY's were selected by the Area Office. FAR-B has also funded support for the Beltsville Area's Diversity Task Force, details of this are found below. Again this year, FAR-B is operating on a negative budget--we are spending more than we are taking in with dues and donations. We cannot continue to do so for many more years, but the BOD's felt that BARC really needs our help now.

MEMBERSHIP RENEWAL APPLICATION

Personal Membership.....	\$30
Patron Membership.....	\$100
Sustaining Membership	\$500 (or above)
Associate Membership	\$15

Make checks payable to: **FAR-B, Inc.**

Return Membership Application to:

**Friends of Agricultural Research-Beltsville, Inc.
P.O. Box 1061 • Beltsville, MD 20704-1061**

Name: _____

Address: _____

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E-mail: _____

FAR-B had special judges in the Montgomery and Prince Georges Middle School Science Fairs held on March 16 and 9, respectively. We presented 18 special Certificates and Target gift card Awards for 1st, 2nd, and 3rd place, (\$30, \$20 & \$10, respectively), in each of three categories (Biology, Environmental Science, and microbiology and health). FAR-B thanks the judges who gave up their Saturdays to participate in this event.

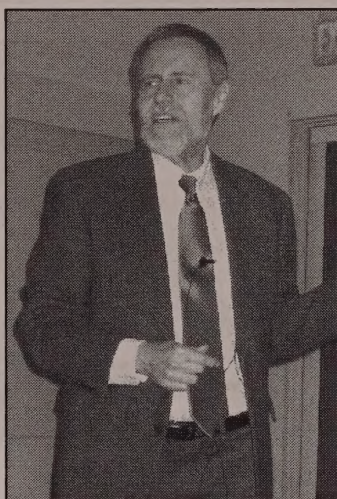
On March 20, 2013, I had the honor of submitting FAR-B's written testimony to the U.S. House and Senate Subcommittees on Agriculture, Rural Development, Food and Drug Administration, and Related Agencies of the Committee on Appropriations. FAR-B whole heartedly gives Jim Butcher a **BIG THANK YOU** for putting so much hard work and insightfulness into this document. Darwin Murrell also deserves a great deal of credit for developing this document that can be found on our website www.far-b.org/testimony.html. This year's testimony had to be submitted by March 20, 2013, but the President's budget was not yet released. Because of this, we supported the research agenda submitted in 2013. We also requested funds to remodel Bldg 307. In addition to submitting the testimony to Appropriations Committee's, FAR-B also sent copies to all the members of Maryland Delegation (two Senators and eight Representatives).

Dr. James Smith left the Board of Directors of FAR-B to pursue writing a history of nutrient and vitamin research done at the Beltsville Human Nutrition Research Center. He will be spending a great deal of time in the National Agricultural Library. Jim, the Board of Directors and the membership of FAR-B, THANK YOU for the years of dedicated service you gave to FAR-B.

We have a new member of the Board of Directors, Dr. Richard Parry, a former member of the National Program Staff of ARS. Welcome aboard Dick. FAR-B is looking for others to join the BOD's. If you are interested, please contact a Board member, found on our website.

In closing, I want to encourage all who haven't already sent in their FAR-B dues, to please do so. We desperately need your support.

James Anderson, President



Joseph Spence addresses the Board at its Annual FAR-B Meeting in May.

Area Director's Message

Although this has certainly been a challenging year for the Beltsville Area, ARS and the entire Federal government, I think that it is a real testament to our scientists and staff that we have been able to perform at a level that is truly remarkable. I know of many Beltsville employees that are doing the jobs of more than one person and doing them well. While we all know this cannot continue indefinitely, it is a statement that speaks to the dedication and commitment of our employees that they have been able to perform at such an exceptional degree under very strenuous circumstances.

Despite the adversity we face, our scientists and our staff at all levels continue to produce some of the most exciting and impactful agricultural research found anywhere. This continues to be verified by the high degree of recognition of our scientists through RPES and the stream of recognitions that have been bestowed on our staff. This does not stop with the scientists but is apparent at all levels of the organization. I have received numerous comments about how the appearance of the research center has improved. It is not uncommon to have scientists tell me about what a great job their technician, secretary or the farm crew or facilities services are doing. I wish that we could do more to thank all of our employees during these strenuous times.

While we have been and will continue to be challenged for a while, I am convinced that the Beltsville Area is well positioned to flourish in the coming years no matter what the challenges might be. I am a firm believer in building "strength on strength" and it is clear that one of the strongest foundations in ARS exists right here in Beltsville. We have the staff, the facilities, and the breadth of

A Thank You Note from the Beltsville Area Diversity Task Force

Dear FAR-B Members,

The Beltsville Area Diversity Task Force would like to extend a sincere "Thank you" to your organization for its continual support of our endeavors. Our group has taken on the mission to provide support and leadership to the Beltsville Area Administration to ensure that the research mission of ARS is preformed at the highest scientific level possible. The creation and maintenance of a workforce that represents the Nation's and surrounding community's increasingly diverse population will ultimately aid in the achievement of that goal.

We have dramatic impact with the implementations of such programs as:

Cultural Heritage Month celebrations-- Hundreds of employees and community participants have been able to interact and learn about the diverse heritage of our workforce. Many collaborations have been fostered by these exchanges.

Continual development of the BA Student

Discovery Garden--More than 2,000 pounds of fresh produce and herbs have been donated to local food pantries and charities in line with the mission of Feds Feed Families. Additionally, more than 1,000 visitors have had the opportunity to discover what the Beltsville Area has to offer.

Development of a Hispanic Serving Institutions Summit and webinar series to focus solely on critical AR issues and funding such programs.

FAR-B members have helped make all of these endeavors successful with their constant support. We anticipate that our efforts will inspire a diverse community of future scientists to see the wealth of possibilities in Agricultural Sciences and FAR-B will be an integral part of that achievement. We applaud your dedication to promoting the importance of Agricultural Sciences through outreach and employee development. We look forward to future collaborations.

Thank you for your continual support,

Verneta Gaskins
Beltsville Area Diversity Taskforce

knowledge and expertise that can and will be helpful in the future. Our expertise is widespread and is strong in those areas of research that are priorities for the Department. I truly believe that over the long term, this will be more widely recognized and as resources become available, the Beltsville Area will be able to build on its firm foundation of outstanding agricultural research.

Joseph Spence, Area Director

Financial Report

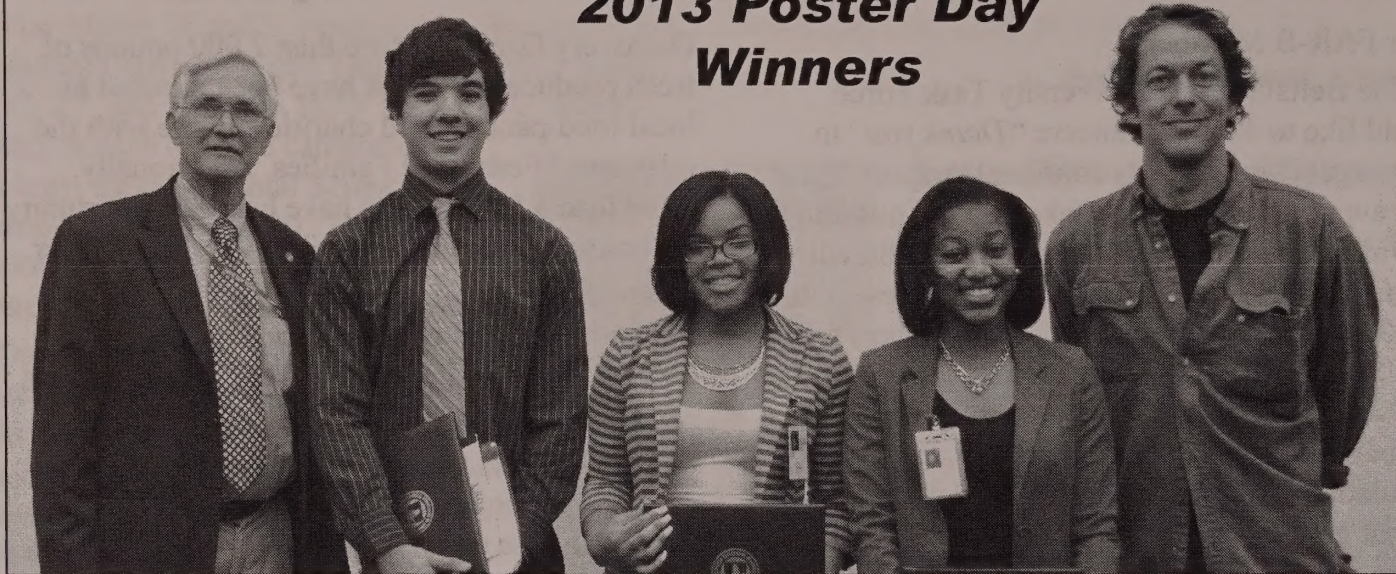
FAR-B continues to have a strong financial position in 2013. Thus the Board decided to use some of the reserve funds to continue Beltsville Area program support this year at the same level as in 2012. With the planned deficit, FAR-B reserves should still exceed \$50,000 at the end of the year. However, not being able to participate in the Combined

Federal Campaign in the fall of 2012 will have a major impact on reserves and could limit support options in 2014. To date, operating income has been \$6,221, less than 60% of the results at this time in 2012. The main income sources are dues (\$3,929) and donations (\$2,092). Major expenses to date include funding for four student interns this summer (\$18,400), BARC Poster Day (\$1,913), middle school science fairs in Montgomery and Prince George's Counties (\$449), and Beltsville Area Diversity Task Force programs (including the Discovery Garden) (\$424).

Membership renewals are lagging behind last year. For those who have not yet renewed, please use the form printed on page 1 of this newsletter and send in your dues as soon as possible.

Richard Zimmerman, Treasurer

2013 Poster Day Winners



From left: President Jim Anderson; Andrew Conchas, Allison Wallace, Collette Harding and Dr. Dean Hively (Mentor for Collette and Allison).

First Place Winner

Collette Harding

Charles Herbert Flowers
High School

Mentor: Dr. Dean Hively, ANRI

Poster Title: *The Effects of Rye
and Vetch on Biomass and Nitro-
gen Intake*

Second Place Winners

Allison Wallace

Charles Herbert Flowers
High School

Mentor: Dr. Dean Hively, ANRI

Poster Title: *The Effects of Spe-
cies, Growing Degree Days, and
Soil Nitrogen Content on the
Growth of Small Grains Used as
Winter Cover Crops*

Andrew Conchas

James Hubert Blake High School

Mentor: Dr. Gloria Solano-Aguilar,
BHNRC

Poster Title: *The Effect of Milk Fat
Versus Vegetable Oil on the Intes-
tinal Microbiota of Juvenile Pigs
Fed and Isocaloric Low-Fat or
High-Fat Diet*

IN MEMORIAM

T.C. Tso

Far-B member and long time ARS tobacco expert, T.C. Tso was a senior scientist who died at the age of 95 of heart disease on April 9 at his home in Silver Spring. Tso joined USDA tobacco research in Beltsville in 1962 and became laboratory director

in the late 1960's. He joined ARS in 1952 and retired in 1983. He was a leader in laying the foundation of organic metabolism of phytochemistry: the roles of organic compounds—such as sugars, organic acids, amino acids, sterols and polyphenols—in plants, and their metabolism in the plants. His research findings have broad applications. For example, he developed a group of fatty acid compounds that are widely used in the fruit and flower indus-

tries for thinning purposes. Much of his work supports medical and nutritional uses of tobacco plant constituents. In the early 1990s, Tso played a key role in establishing a scientific team that helped resolve a major wheat trade issue between the US and China, resulting in increased US wheat exports to China. During his tenure, he developed a method of removing harmful proteins from the tobacco leaf.

He was the author of many scholarly articles and books. After retiring from USDA in 1984 he worked as an independent consultant for USDA and the tobacco companies until 2005. He founded the non-profit institute of International Development and Education in Agriculture and Life Sciences (IDEALS) in 1984 and was the executive director of the organization until 1997.

Tien Chioh Tso was born in Hubel Province, China. He graduated in 1941 from the University of Nanking where he also received his Masters Degree in agricultural chemistry in 1944. He served in the Chinese Military before moving to the US. He received a doctorate in tobacco biochemistry sciences from Pennsylvania State University in 1946 and became a US citizen in the early 1960s.

Tso received several professional honors, including the USDA Superior Service Award in 2005. In 2002, he was inducted into the ARS Hall of Fame.

His survivors include his wife of 63 years, Margaret Lu Tso of Silver Spring; two children Bette Tso of Crownsville and Paul Tso of Atlanta, a sister Hsing Hua and two grandchildren.

Charles H. (Hank) Dickson

FARB member Charles H. (Hank) Dickson, Jr. of Lanham, MD, was born on June 12, 1931 in Oak Park, IL, son of Charles H. Dickson, Sr. and Gladys Rudolph. Hank attended Ben Franklin High School, followed by Occidental College, where he was editor-in chief of the school newspaper from 1952-1953 with a scholarship. He graduated in 1954, whereupon he studied at Fletcher School of Law & Diplomacy in Boston for 1 year, getting his master's degree in 1955 and moving to Washington, DC.

From 1999 to 2005 he was Executive Secretary of the Board of Directors of FAR-B. He also headed

its Community Outreach Committee, which works on various school-related activities conducted by BARC for numerous nearby schools and wrote Congressional Testimony for FARB.

In October 1957, Hank Dickson married Marilyn Kennon of Springfield, MO. She passed away in 1998 of emphysema. Hank will be buried next to her. His son Charles H. Dickson, III, lives in Laurel, MD with his wife Lisa. They have two daughters, Tabitha and Nina. His daughter Cora Dickson lives on the Eastern Shore of the Chesapeake Bay in MD with her husband William Fielder. Hank is also survived by his brother Peter Dickson of Dallas, TX.

While a member of ARS's Communications and Data Services Division, he became manager of a new Microcomputer Technology Center, about the same time that IBM PC's were exploding exponentially everywhere. When that division disbanded, he moved to the Hydrology Laboratory where---for some 10 years---he helped staff members deal with problems such as collecting, entering, and analyzing scientific data while utilizing the best electronic technology available. He also made sure the laboratory's training needs regarding new hardware and software were creatively met either in-house or out-house.

He retired from the USDA in January, 1995 after 35 years of federal service. In the late 1960s Hank joined the DC Chapter of the Association for Computing Machinery (ACM) and served as editor of its newsletter. In the 1990s and 2000s he volunteered as a special awards judge for the chapter at metro DC area science fairs. From 2002 to 2004, Hank was also special awards judge for the ACM at the INTEL International Science and Engineering Fair.

For several years in the 1990s and 2000s, Hank was a volunteer for The Science and Engineering Apprentice Program (SEAP), sponsored by American Society for Engineering Education and the Department of Defense, an 8-week summer program for high school students. At the end of the summer, the SEAP students are required to present their research. Hank's role as convener was to facilitate their presentations at George Washington University. In 1994 he received an award as the Hydrology Laboratory's mentor for the High School/Tech program designed to provide summer job experiences

in a high-tech environment to students with physical disabilities.

Milton Ouye

Dr. Milton T. Ouye of Bowie, Md. passed away on Saturday, March 12, 2011. Ouye worked for more than 30 years at the Department of Agriculture in Beltsville, Md. He had a Bachelor of Science in Biology/Chemistry and a Ph.D. in Entomology. He was the National Program Leader for Biological Controls. His specialty was the Mediterranean Fruit Fly and other exotic invasive pest.

He was the son of the late Hamaichi and Teruko Ouye of Kealia, Kauai, Hawaii. He is survived by his loving wife of 28 years, Rachel Ann and children Franklin Clark, Roxana Clark, Steven Clark (Cathy) and Louis Clark (Jennifer). He is preceded in death by his late wife Laurel G. and survived by their children Gene Ouye (Vicky), Karen Dallas (Brian), Glen Ouye and Laurene Galango (Al). He is also survived by thirteen grandchildren: Natasha Berry (Jesse), Candice Levin (Brandon), Tara Clark, Frankie Clark, Steven Clark, Joseph Clark, Alison Clark, Nicholas Clark, Michael Dallas (Selena), William Dallas, Jennifer Galango, Madeline Ouye and Emily Dallas; four great-grandchildren: Louie Berry, Savannah Leigh Corey, Madeline Alice Levin and Nicholas Dallas. A Memorial Service was held at 10:30 a.m. on Saturday, March 19, 2011 at Holy Trinity Church, 13106 Annapolis Road, Bowie, MD 20720.

Charles Frederick Cohen

Charles Frederick Cohn of Upper Marlboro died on April 10, 2013 at the age of 82 after a short illness. He was born in Los Angeles to Merritt Cohen and Ethel Sheftall Cohen. He received his Bachelor of Science Degree from Morehouse College in 1952 and did a 2 year tour of duty in the US Army and then completed his MS in science at Howard University. This led to a career in entomology at the

USDA from which he retired in 1985.

Survivors include his daughters Lisa Cuthbert and Leita Watts; son Anthony Cohen; grandsons Paul and Jonathan Cuthbert and Jason Watts; several cousins including Ursuline Dickey; former wives Shirley Cohen, Joan Foster and Sherry Ventura.

In lieu of flowers, please consider contributing to Morehouse College.

Harry Herlich

Dr. Harry Herlich of Deerfield Beach, FL and formerly of Greenbelt, MD, died on January 2, 2013. Herlich was a former Institute Director of the Animal Parasitology Institute at BARC in the 1980s and a distinguished ruminant parasitologist. He was 87 years old and died near his retirement home in Florida.

He is survived by his loving wife of 63 years, Charlotte (Ashman); beloved daughters Myra Lewis and Helen Herlich; beloved sons William (Marie) Herlich and Steven (Nancy) Herlich; grandfather of Jessica, Sara, Michael, Joseph (Stephanie) and Adam; step-grandfather of Nicole and Jessica; great-grandfather of Julia, Sophia, and Jordan.

Service and interment were held at Arlington National Cemetery. Expressions of sympathy may be made in the form of a donation to Hospice By the Sea (1531 W. Palmetto Park Rd., Boca Raton, FL, 33486-3395) in Harry's memory.

Mark Bohning

Mark Bohning, a Plant Germplasm Program Specialist with the USDA-ARS National Germplasm Resources Laboratory in Beltsville died on June 13 at St. Agnes Hospital, Baltimore from multiple organ failure. Mark had been having some ongoing medical problems for awhile, although his sudden passing at age 53 is tragic and shocking to his many friends and colleagues.

Mark was a Plant Germplasm Program Specialist with NGRL where he worked on a variety of projects to support the US National Plant Germplasm System. He was the primary liaison between ARS

and our 42 Crop Germplasm Committees (CGC) and travelled to many CGC meetings over the years. He participated in the Apple CGC teleconference on Friday May 3--his last CGC meeting as it was one his favorite committees with which to interact. He also helped assign Plant Introduction numbers for the NPGS and was always willing to help sites load data into GRIN (Germplasm Resources Information Network), generate reports for ARS, and generally help users understand the system. He would toil quietly and without complaint to help enter many germplasm requests that were received as emails into GRIN. He could always be counted on for assistance using his wealth of knowledge. He was always willing to help out in any way he could, without fanfare or need for recognition.

Few ARS employees knew the history, and had breadth of knowledge, of the NPGS and GRIN as well as Mark; he literally grew up with the system. He began working for ARS in 1980 while he was still an undergraduate student at the University of Maryland. He received his B.S. and M.S. degrees in Horticulture from the University of Maryland in 1982 and 1985, respectively. He spent his entire career at BARC, almost all of it in NGRL.

Mark knew so many people associated with our genetic resource collections--from the curators and gene bank staffs, to stakeholders and colleagues in other USDA agencies, to the CGC Chairs, to a great many of the public and private sector members of the 42 CGCs.

Robert Bordner Rathbone

Bob Rathbone was director of information at ARS in the 1960s and a long-time Maryland resident, moving to the area in 1950 with a job at the USDA, ARS Information Division. A resident of Asbury Methodist Village in Gaithersburg, MD, Bob died of cancer on March 5, 2013, at age 93. He was surrounded by family. Bob was chairman of the University of Maryland's Dept of Information and Publications. Born and raised in Manhattan, KS, he was introduced to journalism as a

boy, spending summers working on a small weekly newspaper, and graduated from Kansas State University in 1942 in journalism. He served in the US Navy, as a Lieutenant aboard a destroyer during WWII and after that, he went from newspapering to a career in agricultural journalism and positions in higher education.

He was the husband of the late Maxine Ewing and Ann Eastwood, and is survived by his daughters Susan Schriver and Mary Ann Bates, and son Bob Rathbone; seven grandchildren, and nine great grandchildren. He will be interred at Rock Creek Cemetery, with a private service, and donations may be made in Bob's name to the Salvation Army or the United Methodist Committee on Relief.

Joseph Francis Skelsey

On November 25, 2012 at Inova Alexandria Hospital. He as predeceased by his loving wife, Alice Fulton Skelsey and brother Michael Smigielski Shea. He is survived by his children, Anne Tipton Skelsey Helvey, Joseph Fulton Skelsey, Jr., Henry Fulton Skelsey and William Carl Skelsey; their spouses Gregg Allen Helvey, Susan Cassidy Skelsey, Susan Warner Skelsey, and Maral Kibarian Skelsey; siblings, Hedwiga Joan Fiumara and Gertrude Restighini; and grandchildren, Gregg Fulton Helvey, Joseph Tipton Helvey, Henry Fulton Skelsey, Jr., William Michael Skelsey, Charles Randolph Skelsey, Katherine Cassidy Skelsey, Nicholas Joseph Skelsey, Anna Katherine Skelsey, Charlotte Rose Kibarian Skelsey and William Frederick Kibarian Skelsey.

A visitation will be held from 9:30 a.m. until the Funeral Service begins at 10:30 a.m. on Monday, December 3, 2012 at Fairfax Memorial Funeral Home, 9902 Braddock Road, Fairfax, VA. Interment will follow at Fairfax Memorial Park. In lieu of flowers, donations may be made to Boston College, "In Memory of Joseph Skelsey - Financial Aid", Cadigan Alumni Center, 140 Commonwealth Avenue, Chestnut Hill, MA 02467, or online at: www.bc.edu.

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BELTSVILLE AREA
Area Director: Joseph Spence

Friends of Agricultural Research–Beltsville, Inc.
P.O. Box 1061 • Beltsville, MD 20705-1061



THE FAR-B NEWS

Dedicated to promoting the research and education programs of the BELTSVILLE AREA, Beltsville, MD

Friends of Agricultural Research-Beltsville, Incorporated P.O. Box 1061, Beltsville, MD 20704-1061

JANUARY 2014

Editor: Hank Becker

Aileen Lee Leaves FARB Bequest

Aileen Lee was born in 1931 and died in 2013 at the age of 82 of *Pulmonary edema*, a condition often caused by congestive heart failure. She was raised in Beltsville and was the only child. She attended Beltsville Elementary School and graduated from high school in Hyattsville in 1947. She immediately went to work as a telephone operator at Fort Meade before going to work for USDA downtown. She returned to work at the Beltsville Agricultural Research Center in the 1970s where she served as the secretary to Robert L. Almond who headed the Facilities Operations Division at the Center. In addition to her other assignments, Aileen later served as secretary to Dr. Philip Kearney, Chairman of the Natural Resources Institute, before retiring



Aileen Lee at her retirement party in 1997.

in 1997. In 1998, she lived at 4403 Yucca Street in Beltsville.

At BARC she was introduced to Michael Combs who worked as an ARS technician in the Seed Research lab. He and Aileen were married in 1951 and divorced in 1976. Mike later worked for Karl Norris in the Instrumentation Lab before finishing his ARS career as a tour guide at the ARS Visitor's Center. Mike retired in 1995 and died in 2006.

Mrs. Lee had two sons, Michael F. and Charles Kevin Combs. Kevin is 54 years old and has 3 children and lives in Columbia, MD. Michael is 56 and has 2 children and lives in Martinsburg, WV. She was a dedicated member of the Friends of Agricultural Research—Beltsville. Her bequest of \$41,000 was the most generous in FARB's history.

Remembering FARB in Your Will or Trust Fund

Did you know you can remember FAR-B in your will or trust! . . . And, it's tax deductible for your heirs. FAR-B accepts donations and bequests through General Donations to fund the general mission of the Beltsville Area or Donor Advised Fund (DAF) to support a self-selected unit, program, or activity in the Beltsville Area.

Your estate would be eligible to deduct the full amount of your gift, thus freeing your heirs from estate tax on your gift. An attractive feature is that you may establish a DAF during your lifetime with an initial donation of \$5,000 or more, and subsequently make unlimited additional donations of \$100 or more. A donation would be tax deductible for the tax-year in which it is made. This feature offers the opportunity to begin financial sup-

port for your selected activity or unit without delay. Still additional donations to the DAF may be made by a bequest established within your will or trust.



Besides Aileen Lee's generous bequest of \$41,000, in July, FAR-B received a check for \$1,000 from John G. Moseman's son who is his trustee, to establish the formally known John G. Moseman and Marjorie B. Mose-

man Trust. John died several years ago, and she died in early 2013 or late 2012. Moseman was a grain breeder at BARC, first director of the old Plant Genetics and Germplasm Institute formed in the 1972 reorganization, and a FAR-B member.

For more details, check out the FARB website: www.far-b.org under Donations and Bequests.

President's Message

Dear Friends and Colleagues;

This past year was really one of change for the Beltsville Area. In reorganization, the Beltsville Area was made to look more like the other Areas in ARS. Details on the reorganization Area Director's Message. The sequester and the resulting budget cuts hurt the research effort at Beltsville.

FAR-B was the recipient of a generous donation from deceased retired employees, Aileen Lee and John Moseman.

FAR-B's draft budget was approved at the January 14, 2014 meeting. Again, FAR-B funded four summer high school interns (\$4,600 each) for the Beltsville Area. The Area office will develop a protocol for awarding these interns. It is FAR-B's intention that these internships provide meaningful research experiences for academically promising high school or college students, so that they will consider science or an agriculturally-related career when they complete their formal education as well as provide high quality support to the SY. The 2014 budget is a negative one again--we will be spending more than we take in. We anticipate an operating income of \$13,800 with operating expenses of \$32,700. The difference will come out of our reserve funds. We are always hopeful that we will get more actively working employee members (Associate member) and donations so that we can limit the use of our reserves. FAR-B is again a member of the **CFC number 40122**.

I am proud to say, FAR-B co-sponsored numerous major events at BARC this past year. This included the support of the Beltsville Area Diversity Taskforce which included seven meeting throughout the year and two postponed because of the Government shutdown. Also, we supported the Student Discovery Garden which had over 900 visitors this past year. For a complete list of activities FAR-B supported, visit our website: www.far-b.org.

FAR-B helped sponsor the Beltsville—University of Maryland Fall Symposium Trends in Agriculture held at the USDA National Agricultural Library. However, this symposium had to be postponed until January 23, 2014 because of the Government shutdown. The title this year was *Climate Change—Food and Environmental Security*.

Once again, a group of FAR-B members will be judging Middle School Science Fair projects in Montgomery and Prince George's Counties. Judging Middle School County Science Fairs has been one of our outreach activities for the past seven years. There are lots of very bright young women and men at these science fairs, and we believe our small cash awards and our certificates help keep them interested in science. We give awards in four areas; Environmental Science, Biology, Microbiology and Health, and new this year, Computer Science/Engineering. Each category awardees receive; a first (\$30), second (\$20) and third (\$10) place gift card and a certificate. Last year we gave out 18 awards. If you're interested in judging these young developing scientists, please call or send me an email. We can always use your help. And, I guarantee that you will enjoy visiting with these youngsters as they talk about their projects.

In April, FAR-B will again be hosting the luncheon for the BARC Poster Day and presenting awards to the top three posters presented by the high school interns who are working in various BARC laboratories. The top award is the Vernon G. Pursel Student Scientific Achievement Award.

The science trailer from the Maryland Agricultural Education Foundation returned to the Beltsville Academy under the sponsorship of FAR-B. FAR-B, along with the school and its PTA, sponsored the trailer in the fall of 2014 (see story on page 4).

In closing, please remember that it's time to send in your FAR-B membership dues. They are very essential for FAR-B to continue our support of various activities at BARC. In 2012, FAR-B was not included in the Combined Federal Campaign (CFC)--our biggest single source of income for FAR-B, but now we have been reinstated to the CFC in 2014.

Wishing you all a healthy, happy and prosperous New Year!

James Anderson, President

Area Director's Message

The Beltsville Area has had to deal with a fair amount of adversity over the past year. None was more devastating than the loss of Dr. John Milner, Director of the Beltsville Human Nutrition Research Center. We were most fortunate to have been able to

Essex Finney

From: "JAMES D ANDERSON" <janderso1@mac.com>
To: "Dr. Essex E. Finney" <eefinney2@msn.com>
Sent: Tuesday, March 25, 2014 1:58 PM
Subject: Fwd: THANKS

FYI

Begin forwarded message:

From: DON BILLS <donbills@comcast.net>
Date: March 25, 2014 1:55:00 PM EDT
To: JAMES D ANDERSON <janderso1@mac.com>
Cc: DON BILLS <donbills@comcast.net>
Subject: THANKS
Reply-To: DON BILLS <donbills@comcast.net>

Hi Jim,

Thanks for sending me the information on FAR-B and the link to subscribe to AR Magazine. I was saddened to learn of the deaths of so many good people I knew at BARC. Aileen Lee and I retired on exactly the same day, January 6, 1996. Aileen came over to my office early on the morning of the day of our retirements and we spontaneously started dancing the Twist without music.

Al Piringer had a wonderful sense of humor. I don't know if you knew Bud Kerr, but Bud had a penchant for talking and talking and talking. If Bud ever trapped you in a "conversation" you would find it hard to escape. I came down from ERRC to be on a peer panel with Al Piringer as chairman. The panel meeting was at the south end of the first-floor hall in Building 003. To get to the panel meeting, one had to walk past Bud's office, and he kept his door open. Bud trapped me, and I was a little late getting back to the panel meeting. I told Al Piringer why I was tardy, and he told me the following: "When you go by Bud's office, don't stop, keep walking, put out your hand, shake Bud's hand, and say, 'Been nice talking to you, Bud.'"

Bud once called me at home when I was gone to a meeting in another city. When I got back home, my wife told me that someone in ARS had called and when she told him I was away for a few days he talked to her for over an hour. I said, "Let me guess,

the person's name was Bud Kerr." She said, "That's right, how did you know?"

Well, Jim, I've been retired from ARS for 18 years. I knew some good people in ARS, but I don't miss the organization at all. I wanted to live a long time to get monetary payback for all the grief I put up with from the Ramagopals and Ruth Nashes in the Agency. And then there was Jerry Cohen!

When you see Essex, please give him my best regards. He was the finest boss I ever had anywhere and a wonderful person in all regards.

Keep on keeping on, Jim.
Don

- Show your essay to friends and family members to get feedback and revise if necessary.

Resources

[Best Reads: Best Memoirs and Autobiographies](#)

[The American Scholar: How to Write a Memoir](#)

recruit him to that position starting in July of 2012 and in a short period of time he had made great strides toward improving the stature of the Center and had established many new research collaborations in and outside of the Beltsville Area. He will be greatly



John Milner

missed as a leader, colleague and friend to many of us and we wish the best to his family following such a sudden loss. To ensure that we can continue to build on the strong foundation that he had established at BHNRC in a short period of time, we will quickly begin a recruit action to fill his former position.

In the past year, Beltsville employees had to deal with the loss of funds due to rescission and sequestration. Many of the labs were left with budgets that could not adequately support the research projects. On top of that, the huge backlog in vacant positions has been very slow to dissipate and in many instances even though funds were available, hiring was not possible or took forever. It definitely was a challenge and it was not uncommon to see employees doing the jobs of two or three people. All of these sacrifices occurred when we were not allowed to recognize these extra efforts with any type of award. The final challenge came with the government shutdown that occurred at the start of the fiscal year. It lasted longer than anyone anticipated and certainly had an impact on our research. It is a real demonstration of the dedication and quality of the staff we have at all levels here in the Beltsville Area that we were able to function at such a high level in the face of these challenges. Beltsville continues to produce the best agricultural research and the research output continued unabated and the impact of the work was as impressive as ever.

Hopefully, these challenges are behind us and 2014 will be a better year. The federal budget was just approved and there is a healthy increase in the budget for ARS including some restoration of the funds that were lost to sequestration. ARS has several new and exciting research initiatives that will be started and Beltsville scientists will play a prominent role in their implementation. Employee awards, although capped, have been restored and employees

will see an across-the-board pay increase for the first time in several years. Research activities across ARS are being carefully evaluated and there is a growing recognition that we are going to have to be strategic in our research planning in the future. New budget priorities are being developed by the Agency and it is encouraging that these priorities coincide with areas of research for which Beltsville has unique and well-recognized strengths. While no doubt there will be some surprises on the horizon, I am optimistic that the challenges in 2014 will be easily overcome and that the Area is well positioned to take advantage of the opportunities that I know will be coming this year.

Joseph Spence, Area Director

Financial Report

In 2013, FAR-B had operating income of \$8,356 and expenses of \$25,162 with \$16,806 in reserve funds used to cover the net loss, which had been anticipated and approved by the Board. In addition, investment income of \$2,750 was earned and reinvested. FAR-B was very fortunate to receive two bequests, \$1,000 from the Moseman Family Trust and \$40,778 from Aileen Lee (see cover story), which the Board has invested while deciding upon specific uses for these unanticipated funds. Operating income comprised dues (\$4,734), donations (\$2,447), registration fees for the 3rd Annual Beltsville Area—University of Maryland Symposium (\$975) and a service fee (\$200). Dues income was up 13 percent from 2012 (mainly due to a new Sustaining Member) and donations were down 4 percent from 2012. Expenditures by category were: research (77 percent), education (14 percent), outreach (4 percent) and administration (5 percent).

In 2013, FAR-B fully funded four high school student interns in the Beltsville Area as well as again supporting the following activities: the numerous programs organized by the Beltsville Area Diversity Task Force, including the Student Discovery Garden; the science enrichment program at the Beltsville Academy; the BARC Poster Day; and awards at middle school science fairs in Montgomery and Prince George's Counties. FAR-B also has assisted with the 3rd Annual BA-UMD Symposium, postponed from October until January 23.

Richard Zimmerman, Treasurer

ARS Administrator Ed Knipling Retires

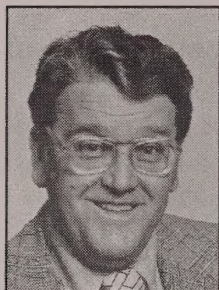
As of September 1, 2013 Dr. Ed Knipling retired as ARS Administrator after more than 48 years of Federal service, plus 2 years in the U.S. Army. His first positions with ARS were summer jobs at BARC in 1956, 1957 and 1961 while in high school (Arlington, VA) and college (Virginia Tech). After graduation from graduate school (Duke University) and military service, his first career position with ARS was as a research plant physiologist in Gainesville, FL, starting in 1968.

Thereafter, he served in executive research leadership and management positions in Area Offices in Stoneville, Mississippi and Fresno, California (1973-1982). He returned to Maryland in 1982 where he served successively on the ARS National Program Staff in various capacities, as the Beltsville Area Director (1988-89), and then as Administrator (1990-2013).

Since retirement Ed continues to reside at his home in Clarksville, MD with his wife Loretta and enjoys family and friends, participates in various outdoor activities, and manages family forest and farm properties in Virginia, West Virginia and Vermont. He is enjoying a well-earned retirement.

ARS will miss his wise counsel and his keen attention to hiring and training great scientists and scientist managers. Thanks to Ed, we have outstanding people to carry on the ARS mission.

FARB's 3rd President Dies



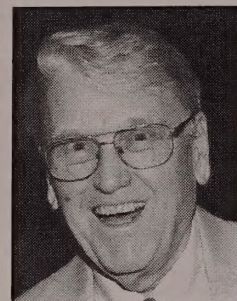
Albert Piringer

Albert A Piringer, Ph.D., a former associate director of the U.S. National Arboretum in Washington, D.C., died January 18, 2014, at his home in University Park, MD. He was 92. Al was a long-time member of FAR-B and served as FARB's 3rd president (1990-1993). He served on the Board many years (1989-1990 and 1993-1996). The

cause of death was heart failure.

Al was born April 24, 1921, in St. Paul, MN and earned his bachelor's and master's degrees from the

University of Minnesota. He served as a medical technician in the U.S. Army in World War II and came to the Washington, D.C., area with his family to complete a doctoral program in horticultural science from the University of Maryland. He received his Ph.D. in 1953. Except for two years in the mid 1950s when he was a professor of horticulture at the University of Minnesota, he served ARS for a total of 32 years, including as associate director of the Arboretum from 1968 to 1972.



Al Piringer

His early research studying the effect of day length on plant growth is recognized internationally. He was part of the USDA team doing pioneer research on phytochrome. He was a three-time recipient of the Leonard H. Vaughn Award of the American Society of Horticultural Science for excellent research published in its journal. At retirement in 1986, he was chairman of the former Horticultural Science Institute, Beltsville, MD.

In retirement, he was a volunteer guide at the Arboretum. After moving to Berkeley Springs, WV, in 1992, he volunteered and was appointed town arborist by Mayor Susan Webster. He also held what he called "horticultural conversations" with other local gardeners. In 2007, he began spending much of the year in McHenry, MD, near Deep Creek Lake, when Maria Spencer retired also.

Al's wife, Phyllis Wegner Piringer, died in 1982, and is survived by his companion of 30 years, Maria Spencer; his four children, and seven great-grandchildren. Contributions in his memory may be made to Friends of Agricultural Research, Beltsville, MD, or, to Hospice of the Chesapeake, or to a charity of choice. His interment at Arlington National Cemetery was private.

Mobile Science Lab Week

FARB again partnered with the Maryland Agricultural Education Foundation (MAEF), the Beltsville Academy, and the school Parent Teachers Association November 18-22, 2013, to bring another week of agricultural science education to the school's eager-to-learn students. This year marks the tenth consecu-

MEMBERSHIP RENEWAL APPLICATION

Personal Membership.....\$30
Patron Membership.....\$100
Sustaining Membership\$500
(or above)
Associate Membership\$15

Return Membership Application to:

**Friends of Agricultural
Research-Beltsville, Inc.
P.O. Box 1061
Beltsville, MD 20704-1061**

Make checks payable to: **FAR-B, Inc.**

Name: _____
Address: _____
City: _____ State: _____ Zip: _____
E-mail: _____

Activities and Events Supported by FARB in 2013 *(continued from other side)*

- ✦ Provided Volunteers and Partial Financial support to bring a Maryland Agriculture Education Fund teaching trailer to the Beltsville Academy—November 18–22, 2013
- ✦ Funded travel of a Post Doc to present findings on potential biological control agents of the Brown Marmorated Stink Bug to the annual meeting of the Entomological Society of America meeting in Austin, TX— November 2013
- ✦ Supplied refreshments for the ARS AC Executive meeting December 2, 3 & 4, 2013
- ✦ The Beltsville Area Diversity Task Force Special Emphasis Programming:
 - ◇ African American History Month Celebration – February 20, 2013
 - ◇ Women's History Month Celebration – March 21, 2013
 - ◇ Asian American Pacific Islander Heritage Month Celebration – May 15, 2013
 - ◇ Student Discovery Garden Season Opener and Fitness Walk – May 24, 2013.
 - ◇ Beltsville Area Hispanic Serving Institutions Summit – Postponed until January 8 to 10 because of Government shutdown
 - ◇ National Gay and Lesbian Pride Month – June 2013
 - ◇ National Hispanic Heritage Month –September 18, 2013
 - ◇ National Disability Employment Awareness Month – Cancelled due to US Government shut down
 - ◇ American Indian Heritage Month – November 20, 2013

Activities and Events Supported by FARB in 2013 *(continued from other side)*

- ✧ Presented Invited Written Testimony to Senate and House Agricultural Appropriations Subcommittee's in support for the Beltsville Agriculture Research Center Research Programs—March 20, 2013
- ✧ Presented 15 Certificates to Elementary Beltsville Academy Students for their posters they made after being in the MAEF Science trailer in October 2012—January 2013
- ✧ Supported the reaccreditation inspection of the BHNRC rodent facility by the Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC) by supplying lunches and refreshments—February 14, 2013
- ✧ Provided funds to support 5 Summer Intern Students for BARC Scientists—March 2013
- ✧ Helps support the Student Discovery Garden Learn at Lunch Seminar Series:
 - ◇ "Honeybees, the wings of agriculture"—March 15, 2013
 - ◇ "Native bees, everything you thought you knew was wrong"—April 3, 2013
 - ◇ "What's in your backyard? Choosing plants to maximize ecosystem services"—May 8, 2013
 - ◇ "Rising CO2 and bee health: exploring secondary effects of climate change"—June
- ✧ BARC Poster Day: Provided Refreshments, Lunches to All Participants and Presented Cash Awards to Top 3 High School Winners—April 16, 2013
- ✧ Provided funds for the travel of a scientist to visit St. Petersburg, Russia to study the collection of Trissolcus wasps, potential biological control agents of the Brown Marmorated Stink Bug
- ✧ Judged Montgomery and Prince George's County Middle Schools Science Fairs and presented 9 gift certificates to FAR-B winners in each County
- ✧ Provided Lunch and Refreshments for 5th Annual Leaders of Tomorrow End of Summer Program & Activities—July 31, 2013
- ✧ Supplied funds for the printing of a brochure on the Brown Marmorated Stink Bug
- ✧ Supplied funding for a scientist to travel to New Jersey in support of research on the Brown Marmorated Stink Bug
- ✧ Handled Registration Fees for 3rd Annual BARC-UMD Trends in Agriculture Annual Symposium: Climate Change, postponed till January 23, 2014 because of U.S. Government shutdown.
- ✧ Supplied refreshments for breaks for the International Conference: "Sustainable Agriculture – Targeting Genetic Selection to Specific Environment and Management Circumstances (GxExM)"—November 14 & 15, 2013

tive year that FAR-B has sponsored a science-themed, educational outreach event that FAR-B has entitled “Mobil Science Lab Week” at Beltsville Academy. This annual event is among the most rewarding of FAR-B outreach initiatives.

The Beltsville Academy is a special school, serving a special student community. The fall 2013 enrollment stands at 1012 students: about 70 percent Hispanic, 15 percent Black, four percent Asian, four percent Multi-race, and seven percent White. Fifty-seven percent of the students receive food assistance; 15 percent of the students are in special education. Sixty-three Beltsville Academy students are enrolled in the school’s Regional Autism Program.

Every week-long mobile science lab event is special, each featuring distinct themes and emphases. Several FARB members help assist the MAEF mobile science lab instructor Carolyn Menne. In 2009, FAR-B, the school, and its PTA began contracting with the MAEF to bring one of the three Mobile Science Labs to the school for a week of instruction in agricultural science and the importance of agriculture in daily life. Students receive hands-on experience hypothesizing, experimenting, collecting data, and then drawing conclusions from their results. All of these lessons match the Maryland State Curriculum.

Each year, MAEF mobile science labs visit about 75 schools, reaching out to some 60,000 or more elementary-age students. Schools and their partners pay roughly 40 percent of the cost of lab operations, with the balance underwritten by MVA Agricultural Tag license plate revenues and other contributions. Those combined resources means that FAR-B can maximize its return on limited resources.

In November, Beltsville Academy Principal, Leslie Lowe, opted to go with the Agricultural Products theme and she chose these lessons:

From Pod to Candy Bar (Grades 1—3)

Students explore how some candy bar ingredients begin in cocoa PODS and then perform an experiment to determine which candy will sink or float because of its ingredients. The lesson ends with a simple taste test to determine the class favorite on a bar graph. Students taste-test a milk chocolate chip, a semi-sweet chocolate chip and a white chocolate chip.

Cream to Butter (Grades 3—5)

Students are given the task of testing various milk products to determine which one will produce butter

and discover why it produces butter. Session ends with students sampling their product. Students learned something about the states of matter—solid, liquid, or gas—while churning liquid milk or cream into solid butter. Students loved tasting newly created butter.

Farmers Protect the Environment (Grades 4—5)

This lesson supports Maryland’s new Environmental Literacy standards as students discover environmentally friendly ways that farmers protect the environment and the Chesapeake Bay. Each student team of up to four students--each designed an environmentally friendly dairy farm. They learned about the where and why of using cover crops, protecting and bridging a stream, placing farm buildings to maximum environmental advantage, building a manure pit for waste management, and much more—a challenging exercise for youngsters of this age.

Jim Butcher, Outreach

IN MEMORIAM

Leland (Lee) W. Briggie

On Friday, November 8, 2013, Lee Briggie, of Silver Spring MD, passed away at the age of 93. Lee was a former Director of the Cereal Crops Division of the USDA Research Station in Beltsville, MD. Born in Bismark, ND, and raised in Hazelton, Lee attended Jamestown College, North Dakota State University and Iowa State University, earned his Ph.D. in Agronomy/Plant Genetics and served in the U.S. Army. He found rich fulfillment in his profession, travelling the world to develop disease-resistant strains of wheat, oat, barley, corn and rice, in an effort to reduce world hunger. Lee was a devoted, loving husband and father, generous friend and neighbor, gifted gardener, skilled handyman, and enjoyed trout fishing, music, sports and a game of Hearts--but most of all, the achievements of his children. Preceded in death by his sisters Phyllis and Lenna, his wife of 60 years, Harriet, and his daughter, Pamela, he leaves behind a son, Gary, of Minneapolis, MN, and extended family including Wendy, Lori and Geri, Jenny and Mike. Lee was a lifetime member of St. Luke Lutheran Church, where a memorial concert was held followed by burial at Arlington Cemetery.



Gorm Emberland

Gorm Emberland

Gorm Emberland, an IT Specialist with the National Germplasm Resources Laboratory in Beltsville, MD, died July 3, 2013 at the age of 54 in Georgetown University Hospital in Washington D.C. of pneumonia. He was born on August 28, 1958.

Gorm was a lead software developer on the Germplasm Resources Information Network (GRIN) system that is used by the U.S. National Plant Germplasm System (NPGS), and which also supports the entire ARS genetic resource collections. A significant amount of the software that is used by the NPGS today was written by Gorm. He was a productive and dedicated developer who was passionate about his career.

Gorm started with ARS as an undergraduate student employee in 1978, working in the computer room at the National Agricultural Library. He obtained a B.S. degree in Zoology (1981) and computer science (1986) both from the University of Maryland-College Park. In 1991, he returned to ARS as an IT Specialist in the National Germplasm Resources Lab to work on the GRIN project. He was the lead developer on a project called pcGRIN that shared our information management system freely with international genebanks plant genetic resource communities.

Gorm is survived by his wife, Dr. Joan Emberland; a daughter, Annie; and a son, Colin.

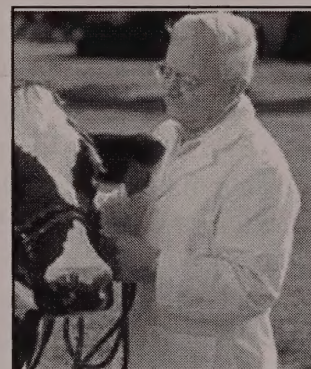
Eleanor G. Frierson

FARB member librarian Eleanor Frierson of Chevy Chase, MD died on April 30, 2013. Born in Columbia, TN, Eleanor graduated from Oberlin College and Syracuse University, she worked at Syracuse University, the US Department of the Interior, the International Monetary Fund, the International Labor Organization, and the US Department of Agriculture. She was a pioneer in creating and disseminating information. In 2010, her achievements earned her Federal Librarian of the Year Award. She was the sister of three Friersons—Claire, Cathy and Elizabeth. She was active in sports and the community, including Advisory Neighbor Commission, choral societies, ten-

nis leagues, the Presbyterian Church and Rotary.

Albert Guidry

Dr. Albert J. Guidry, a former member of the ARS Immunology and Disease Resistance Laboratory, Beltsville MD, passed away from cancer at the age of 78, in Nellysford, VA on June 27, 2013. Guidry's research was initiated at Louisiana State University. He joined the Genetics and Management Laboratory at Beltsville in 1964. At Beltsville, he turned his interests to mastitis and intramammary defense mechanism. Guidry produced the first mouse X mouse monoclonal antibodies specific for bovine immunoglobulin subsets, termed isotypes. These monoclonal antibodies have been used to quantify and affinity purify bovine immunoglobins, and to pinpoint specific isotype secreting cells in mammary tissue. They are being used worldwide for immunogenetic studies, and for cattle disease and vaccine studies. He and his team also used interspecific fusion of bovine lymphocytes with mouse cell lines to produce a collection of stable hybridomas which secreted bovine immunoglobins and served as isotype standards by numerous laboratories. Guidry judiciously applied modern methods of tissue culture, flow cytometry, monoclonal antibody production and molecular biological techniques to markedly advance our knowledge of the host's immune defenses and to improve vaccines



Albert J. Guidry

against *Staphylococcus aureus* mastitis. His accomplishments provided a foundation for mastitis research in the 21st century. He was an asset to agriculture and science, both nationally and internationally. In recognition of his meritorious scientific contributions on mastitis, the American Dairy Science Association awarded him the West Agro, Inc. award in 1996.

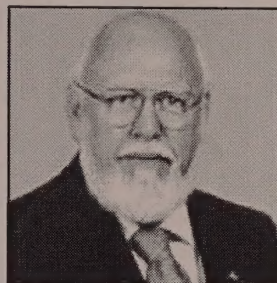
Selma G. Horwitz

FARB member Selma Horwitz of Silver Spring, MD died on November 16, 2011. She was the beloved wife of the late William Horwitz, devoted mother of Frances (Lawrence) Unger, Nancy, (John)

Cooney and Allen Horwitz and several sisters, grandchildren and great-grandchildren.

John Kingsolver

John M. Kingsolver, son of Roy L. and Rena E. Kingsolver, was born in 1925 in Delaware County, IN. He died on December 10, 2013. He was the oldest of four children, the others being Max, Mary and David. He attended rural schools in central Indiana, was a veteran of the U.S. Navy during WWII and graduated from Purdue University in 1951. He entered the University of Illinois in 1954, received a Master's Degree in entomology in 1956 and a PhD in 1961. The family moved to Silver Spring, MD, and John was employed by the US Department of Agriculture as a research entomologist from 1962 to 1990.



John Kingsolver

In 1948, he and Cynthia L. Lindesmith were married in Logansport, IN and had two children, John Mark, Jr. and Rebecca Diane. During these years, John and Cynthia attended St. Bernadette's Church where John sang in the choir. In 1991, they moved to Gainesville, FL. John Jr. died of leukemia in 1989. Cynthia died in 1993 and is buried in Spencer Cemetery near Sheridan, IN. John was married to Audrey Wright who survives him. He is also survived by his daughter, Rebecca of KY, two granddaughters, Jenny and Nancy, and six great-grandchildren.

John spent his retirement volunteering for Catholic Charities, reading books for the University of Florida's radio for the blind, and continuing with his first love, entomology, by writing scientific papers and books while volunteering at the Florida Department of Agriculture in Gainesville, sorting and identifying insects.

Frederick G. Marzke

FARB member Frederick Marzke was born on July 28, 1918 in Lansing, MI. He died on November 3, 2012 in Rochester Hills, MI at the age of 94. He graduated from Lansing Central High School and received his BS and Ph.D. in Zoology. After serving in the U.S. Air Force medical unit during World War II,

he worked as a research entomologist for USDA in Savannah, GA, Madison, WI and Gainesville, FL, retiring in 1975. His brothers, Robert, Oscar and Carl, and his sister Dorothy Paige, predeceased him. He is survived by five nieces.

John A. Milner

Dr. John Milner of Potomac, MD died on Tuesday, December 31, 2013. He was 66. Born in Pine Bluff, AR, he had an impactful career in human nutrition and cancer prevention. He was an internationally respected scientist, well known for his broad understanding of nutrition and its role in cancer prevention. John Milner earned a Ph.D. from Cornell University, with a major in animal nutrition and minors in biochemistry and physiology. He was a faculty member in the Food Science Department at the University of Illinois for 13 years, where he also served as Director of the Division of Nutritional Sciences and Assistant Director of the Agricultural Experiment Station. He was then chair the Department of Nutrition at Penn State University for 11 years, where he also served as the Director of the Graduate Program in Nutrition. In 2000, Milner was hired as the Chief of the Nutritional Science Research Group, Division of Cancer Prevention at the National Cancer Institute. In 2012, John became Director of the BHNRC, USDA-ARS, BARC, whose mission is to define, through research, the role of foods and its components in optimizing human health and reducing the risk of nutritionally related disorders. Milner's personal research program has largely dealt with the impact of garlic (allyl sulfur compounds), selenium and antioxidants on human health and cancer risk. He has authored over 200 publications, served on numerous editorial boards and served as the senior editor of *Cancer Prevention Research*. Milner has served on many advisory boards and he has been the recipient of numerous scientific awards, including the prestigious David A. Kritchevsky Career Achievement Award in Nutrition from the American Society for Nutrition.

He was predeceased by his wife of 35 years, Mary Frances Picciano, who passed in 2010, and is survived by their two children, Kristina Milner of Annapolis, MD, and Matthew Milner of State College, PA.

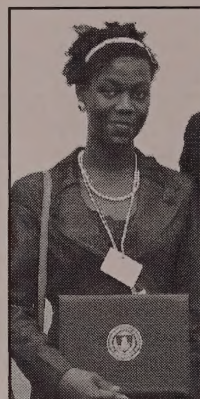
In lieu of flowers, contributions may be made to the John A. Milner Graduate Student Endowment in

Nutritional Sciences, Department of Nutritional Sciences, Penn State University, 201 Henderson Bldg., University Park, PA 16802.

Betty B. Peterkin

Betty B. Peterkin, an ARS nutritionist for more than 25 years, died October 23, 2013 at MedStar Washington Hospital Center in the District. She was 91. The cause was complications from a fall. Peterkin, a resident of Solomons, Md., was deputy director of the Agriculture Department's Human Nutrition Information Service before retiring in 1987. Her primary research areas were food consumption surveys and dietary guidance development. She helped produce and promote the 1985 and 1990 editions of the government's *Dietary Guidelines for Americans*, on which the food pyramid is based. She also helped design and develop the Agriculture Department's Thrifty Food Plan, which serves as a basis for determining food-stamp allotments. Betty Cherry Brown was born in Bloomington, IN, and raised in Rushville, IN. She was a 1942 graduate of Purdue University in West Lafayette. She was a former Girl Scout leader and a member of Bells United Methodist Church in Camp Springs, MD, where she served on the finance committee and planned youth fellowship activities. In 1996, she moved to the Asbury Solomons retirement community, where she served on the board of directors, welcoming committee and residents' council. Her husband of 47 years, Ernest Peterkin, died in 1995. Survivors include three daughters, Janet Brock of East Lansing, Michigan, Nancy Supik of Baltimore and Lucy Peterkin of Bushwood, MD; a sister; and eight grandchildren.

A Special Thank You Note to FARB



Dear FARB members,

I would not be where I am without the strong support of family, teachers, mentors, and friends like FAR-B (Friends of Agricultural Research at BARC). I am a strong black, female, Princetonian, who overcame many challenges in life to become who I am today. One of the challenges I overcame was completing my Science and Technology internship with the USDA while attending Charles Hebert Flowers High School. I was surprised and happy when my research project with Dr. Hively and Dr. McCarty earned me the title of the first Vernon Pursel Awardee. I was honored to be part of his great legacy. As the first Vernon G Pursel Awardee, I hope I can emulate Dr. Pursel especially by accomplishing great things.

I am majoring in either Chemistry or Molecular Biology at Princeton University and hope to work as a research chemist or biologist at USDA. This past summer I had the opportunity of working with USDA again. As a summer intern with the Hydrology and Remote Sensing lab, I worked with Dr. Hively and Dr. McCarty on their photo interpretation project.

I would like to thank the Friends of Agriculture Research at BARC for their continued support! My deepest sense of gratitude to all who have supported me!

Tolulope Adetayo

F A R - B B O A R D O F D I R E C T O R S

President: **James Anderson** janderso1@mac.com
 Vice President: **K. Darwin Murrell** kdmurrell@comcast.net
 Treasurer: **Richard Zimmerman** rhz1415@verizon.net
 Secretary: **Allan Stoner** stonerfam@earthlink.net
 Special Advisor: **Essex Finney** eefinney2@msn.com
 Membership: **Allan Stoner** stonerfam@earthlink.net
 CFC: **Lew Smith** lws406@comcast.net
 BARC Outreach: **Jim Butcher** jim.hickory@verizon.net
 BARC Liaison: **David Chitwood** david.chitwood@ars.usda.gov
 Publicity: **Hank Becker** hankbecker3@verizon.net
 Webmaster: **Jim Mowder** jdmowder@yahoo.com

Board Members: **Withers Horner** wizlizlob@embarqmail.com
Wendy Jacobs Jacobs83@verizon.net
Dr. Phyllis Martin pawmartin24@gmail.com
Richard Parry rmparry@verizon.net

TO CONTACT THE FAR-B BOARD

Call: 301-578-4098 • or visit: <http://www.far-b.org>

Email: farbboardod@yahoo.com

BELTSVILLE AREA DIRECTOR: Joseph Spence

Friends of Agricultural Research-Beltsville, Inc.
 P.O. Box 1061 • Beltsville, MD 20704-1061



THE FAR-B NEWS

Dedicated to promoting the research and education programs of the BELTSVILLE AREA, Beltsville, MD

Friends of Agricultural Research-Beltsville, Incorporated P.O. Box 1061, Beltsville, MD 20704-1061

JUNE 2014

Editor: Hank Becker



President's Message

Dear Friends and Colleagues,

The Annual Meeting of Friends of Agricultural Research – Beltsville was held May 14, 2014 in the Conference Room of Building 005, BARC-W. About 60 members and guests attended. The keynote speaker was Dr. Chavonda Jacobs-Young, the new Administrator of ARS. Dr. Jacobs-Young spoke on *ARS-Advancing Agriculture Thru Research*. In her presentation, she introduced herself by giving a brief talk on her education and professional experience, the numerous personnel changes in the Agency and the proposed reorganization of the Agency going from 8 Areas to 5. The Beltsville Area will be combined with the Northeast Area with the Headquarters of the new Area located in Beltsville. After her formal presentation, she answered questions from the audience.

At her first visit to the Beltsville Area, new ARS Administrator, Dr. Chavonda Jacobs-Young, addresses members at the 2014 Annual Meeting of FAR-B.

She was followed on the program by Dr. Joseph Spence who talked about the Beltsville Area. Dr. Spence reported on the reassignment of Dr. Steven Shafer from BARC Director to the ARS Associate Administrator. He announced that Dr. Ellen Harris is the new BARC Director. Dr. Spence will give more details below.

Following Dr. Spence's presentation I gave a relatively brief PowerPoint presentation on what FAR-B accomplished this past year. FAR-B has had a very busy year in 2013 and the beginning of 2014.

During the Power Point presentation, I was to give the *Vernon G. Pursel Student Scientific Achievement Award* to Sinmisola Tinubu, a senior at the Eleanor Roosevelt High School, but she couldn't make this meeting because she was attending the Intel International Sci-

ence and Engineering Fair (ISEF) in Los Angeles presenting her project. At ISEF she was again successful in presenting her project. She was awarded 4th prize in the Plant Sciences category at ISEF (see details of the Poster Day below).

High lights for 2013 included: Financing four summer interns in 2013 for scientists in the Beltsville Area [awarded to Drs. Jo Anne Crouch (Systematic Mycology), Susan Meyer (Nematology), Matt Greenstone (Invasive Insects) and Dave Guthrie (Animal Biotech)]; judging Middle School Science Fairs in Montgomery and Prince George's Counties where gift certificates were given to first, second and third place winners in Plant Science, Natural Resources, Medical/Public Health, and Computer Science; providing refreshments and/or lunches for Poster Day Participants, 5th annual Leaders of Tomorrow – end of summer event, National Advisory Council for Office Professionals, International Conference on Sustainable Agriculture, and the Reaccrediting Inspection Team for the BHNRC Small Animal Facility; supporting seven programs sponsored by the BA Diversity Task Force (a couple of others had to be cancelled because of the government shutdown); and cosponsoring the Maryland Agriculture Education Foundation Science Trailer at the Beltsville Academy. FAR-B helped with the 3rd Annual BA-UMD Fall Symposium, Trends in Agriculture; Climate Change: Food and Environmental Security on January 23, 2014. This Symposium was supposed to take place last fall, but was postponed because of the U.S. Government shutdown in the fall of 2013.

On March 18, 2014, FAR-B submitted written Outside Testimony prepared for the Senate and for the U.S. House of Representatives Appropriations Committee, Subcommittee on Agriculture, Rural Development, Food, and Drug Administration, and Related Agencies. This testimony was made possible by the dedicated work of Board members James Butcher and K. Darwin Murrell. Thank you, Jim and

Darwin. To see FAR-B's testimony go to www.far-b.org/Testimony.html. We supported the request for increased research funding for the Beltsville Area and for funding the remodeling of Bldg 307. In addition to submitting the testimony to Appropriations Committee's, FAR-B also sent copies to all the members of Maryland Delegation (two Senators and eight Representatives).

A hearty special **THANK YOU** goes to outgoing



Members attend the April 67th Annual FAR-B Meeting.

Treasurer, Dr. Richard Zimmerman. Dr. Zimmerman was FAR-B's Treasurer for two three year terms for a total of six years. FAR-B's by-laws only allow two terms. Since there was no choice, Dick reluctantly turned over the books with a smile on his face. Thank you Dick for all the incredible and detailed work you put into this position. Dick will remain

on FAR-B's BOD's. Our new Treasurer is Dr. Richard Parry.

As mentioned in our last Newsletter, FAR-B received a large bequest from the late Aileen Lee's estate. Ms. Lee retired from BARC in 1996. At the time she was the secretary of the Natural Resource Institute. The FAR-B's Board of Director's is working on developing a new program to be tentatively called the Aileen Lee Upward Mobility Award to help promote the upward mobility of selected support staff at the Henry A. Wallace Beltsville Agricultural Research Center to meet their potential leadership qualities. FAR-B is working with upper Beltsville Management to work on the details.

Total membership is down. This includes full members, patrons, and associate members. We invite anyone who is interested in promoting the research programs of the Beltsville Area-- including all USDA retiree's and active USDA employee's to join FAR-B. Full membership is \$30, Patron membership is \$100, and Associate membership (active employee's) is \$15. All FAR-B activities are paid for from membership dues, donations, left over funds from workshops, sym-

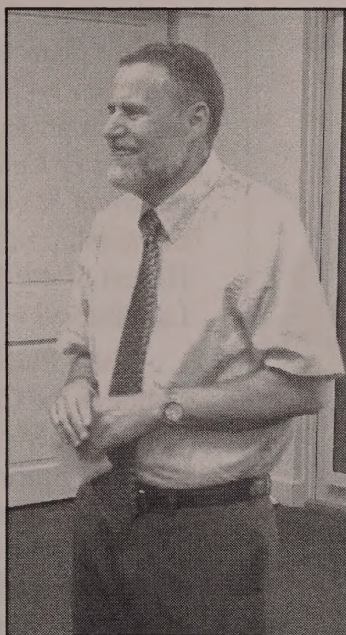
posia, etc. that FAR-B helps cosponsor. FAR-B is very pleased that we are now back in the CFC. We want to thank the employees who so generously donated through the CFC. The employees who participated donated about \$4,000. Thank you.

At the annual meeting, FAR-B members elected officers and a new Board of Directors. New board members are Dr. Phyllis Martin and Withers G. Horner. We are very pleased to have these new members aboard. We are still looking to find new Board members. Please contact me or other members of the Board of Directors. New Officers include Richard Parry as Treasurer, Allen Stoner as Secretary, K. Darwin Murrell as vice President and James Anderson as President. We all look forward to serving FAR-B to help support the research efforts at the Henry A. Wallace Beltsville Agricultural Research Center.

Jim Anderson, President

Area Director's Message

Change seems to be the theme throughout ARS and the Beltsville Area. Dr. Chavonda Jacobs-Young, the newly named Administrator of ARS, has indicated the consolidation of area offices is proceeding with an implementation date of October 1. The Beltsville Area as it has existed for many years will become part of the new North East Area. This is one of several area office consolidations that will more realistically scale the management of ARS to meet the administrative needs of the agency and improve resource utilization. Along those lines, we have realigned some of the laboratories in the Beltsville Area: the Animal Improvement Laboratory and the Bovine Functional Genomics Lab have been combined into the Animal Genomic Improvement Laboratory and the Environmental Management and Byproducts Laboratory has been dissolved with projects and staff being transferred into other units in the Beltsville Area. While both of these actions will keep the current research projects intact, they will better utilize the resources that we have to manage research at Beltsville.



In the current fiscal year, we have been fortunate in that the funding for the Beltsville Area was greatly increased even above the pre-sequestration budget. This increased funding was welcomed by BARC, BHNRC and the USNA. The IRC figures for FY15 were just released and I am pleased to report that we have again reduced our IRC costs in the Beltsville Area. It amounts to a reduction of over \$500K which as we all know is that much more that the labs will have for conducting research. We still have a major facilities need for the renovation of Building 307. While the need is great, I am not optimistic that we will receive the necessary funding anytime soon but would love to be proven wrong.

It is unfortunate that Dr. Steve Shafer was reassigned to the position of Associate Administrator for National Programs after a too brief assignment as Director of the Beltsville Agricultural Research Center. He will be missed but it is safe to say that he will bring a greater understanding of the needs and strengths of BARC to headquarters and he will be in a position to foster collaborations between BARC scientists and others located throughout ARS. We are fortunate that Dr. Ellen Harris has been reassigned to the position of Director of BARC where she brings

her expertise and experience as having been BARC Associate Director previously. The transition in leadership has been a smooth one. We very much appreciate the efforts of Drs. Erin Connor and V.R. Reddy who acted in the absence of permanent leadership in BARC for several months. In addition to leadership changes at BARC, the position of Director of the Beltsville Human Nutrition Research Center is well underway. Several excellent candidates have applied and now we will begin the interview and selection phase of the search. We hope to have a Director named in the next few weeks.

While the way the Beltsville Area has conducted business over the years is about to change, I am optimistic that in the long term the area consolidation will provide new opportunities for all of us. Beltsville scientists and all those who support them will continue to be among the very best in ARS regardless of any future configurations that might be put in place.

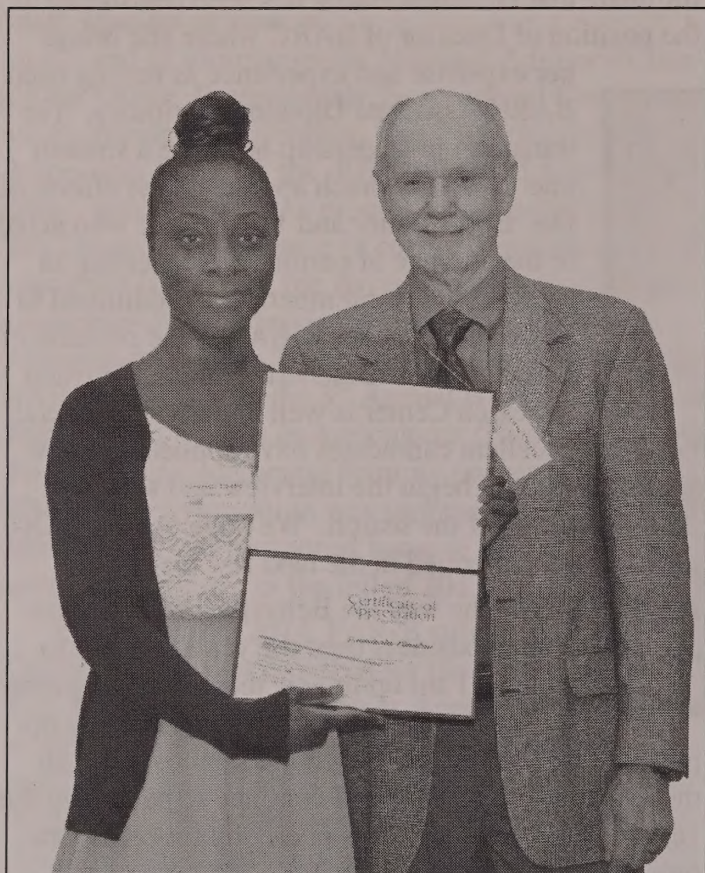
Joseph Spence, Area Director

Financial Report

In the first five months of 2014, FAR-B had an operating income of \$10,842 and expenses of \$24,010, with \$10,000 in reserve funds used to cover the loss, which had been anticipated and approved by the Board. Operating income included \$3,415 in dues, \$1,764 in donations plus \$3,942 from the Combined Federal Campaign. Members who have not paid dues for 2014 are encouraged to renew their membership today. Expenditures included 80% for research, 14% for education, 3% for outreach, and 3% for administrative expenses. Four BARC research internships have been supported for 2014. An audit of the treasurer's books was carried out by members of the Board and approved. FAR-B wishes to thank Dr. Richard Zimmerman for his outstanding work during the past six years.

Richard Parry, Treasurer

Poster Day Winner Receives Vernon G. Pursel Award



Sinmisola Tinubu and K. Darwin Murrell.

BARC Poster Day was held on April 23, 2014 with 25 high school interns and 66 Research Associates, Visiting Scientists and new Research Scientist presenting posters. FAR-B once again played a major role in supporting the event by providing the refreshments and lunch for the poster day participant, and presenting cash awards to the top three student High School intern posters. While FAR-B gives cash awards to the top three winners of the high school interns, FAR-B does not participate in the judging. Judging is done by a committee of scientists from Beltsville. Vice President Dr. Darwin Murrell represented FAR-B.

First Place Winner (\$300) and recipient of the *Vernon G. Pursel Student Scientific Achievement Award* is Sinmisola Tinubu, a senior at the Eleanor Roosevelt High School. Sinmisola Tinubu plans to attend Georgetown University in the fall and plans a double major in International Business and Marketing. Her research project, was carried out under the mentorship of Drs. Don Weber and Megan Herlihy of the Invasive Insect Biocontrol & Behavior Laboratory. She was asked to participate in the Intel International Science and Engineering Fair (ISEF) in Los Angeles and was awarded 4th prize in the Plant Sciences category at ISEF.

Second Place Winner (\$200) is Harriet Dadzie, a senior at the Eleanor Roosevelt High School. Harriet Dadzie plans to attend the University of Maryland, College Park, MD and has an undeclared major. Her research project, *Vegetative incompatibility among isolates of Calonectria pseudonaviculata, the cause of boxwood blight disease*, was carried out under the mentorship of Drs. JoAnne Crouch and Julie Byrd-Hébert of the Systematic Mycology & Microbiology Laboratory.

Third Place Winner (\$100) is Crystal Onwu, a senior at the Charles Herbert Flowers High School. Crystal Onwu plans to attend Duquesne University of the Holy Spirit in Pittsburg, PA. studying Biology and Pharmacy. Her research project, *Multiple dominant selectable markers for the development of a transformation system for Penicillium species*, was carried out under the mentorship of Dr. Wayne Jurick and Vernetta Gaskins, of the Food Quality Laboratory.

FAR-B does not give awards to the employees because BARC presents these scientists with awards. However, FAR-B does provide refreshments and lunches to all the participants



Left to right: Sinmisola Tinubu, Harriet Dadzie, Crysta Onwu and FAR-B Vice President K. Darwin Murrell.

First Place in the Scientist posters is Dr. Boce Zhang of the Environmental Microbial and Food Safety Laboratory, BARC. Dr. Zhang's poster title was *Kinetic study of pathogen inactivation and validation of minimum chlorine concentration and contact time required for preventing pathogen cross-contamination during produce wash operation*.

Second Prize is Dr. Jianwei Qin of the Environmental Microbial and Food Safety Laboratory, BARC. Dr. Qin's poster title was *High-throughput Raman chemical imaging technology for food safety and quality evaluation*.

Third Prize in the Scientist posters is Dr. Saikat Kumar B. Ghosh of the Invasive Insect Biocontrol and Behavior Laboratory, BARC. Dr. Ghosh's poster title was *Double stranded RNA-mediated interference (RNAi) as molecular biopesticide for control of the invasive pest *Lymantria dispar**.

FAR-B thanks all who presented their research results at Poster Day and a special Thank You goes to Drs. Dionne Fortson Toombs, BHNRC and Jo Anne

Crouch, Systematic Mycology and Microbiology Laboratory the Chair and co-chair of the event, respectively. FAR-B also thanks the judges for taking the time and effort to evaluate the posters. Poster Day was a great success.

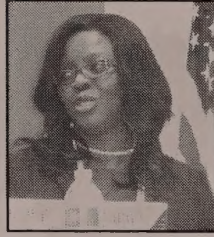
Jim Anderson, President

CFC Update

Contributions to the National Capital Area Combined Campaign is one of two main sources of funding for FAR-B's many activities dedicated to promoting agricultural research, education, and outreach. The FAR-B board of directors thank the many contributors for their generous financial support totaling nearly \$4,000 from the 2013 campaign. FAR-B anticipates participating in the 2014 NCACFC pending approval from OPM by mid-summer. Remember FAR-B's CFC identification number is 40122.

Lew Smith, CFC /FAR-B Board

Dr. Chavonda Jacobs-Young Chosen New ARS Administrator



I am pleased to welcome the new Administrator for the Agricultural Research Service (ARS), Dr. Chavonda Jacobs-Young. Dr. Jacobs-Young recently served as ARS Associate Administrator for National Programs, where she led the Office of National Programs which manages the research objectives of the Agency. She also led the Office of International Research Programs which is responsible for ARS' liaison with its international partners. Dr. Jacobs-Young assumed her new duties effective February 23, 2014.

Prior to moving into her role at ARS, Dr. Chavonda Jacobs-Young served as the Director of the Office of the Chief Scientist in the U.S. Department of Agriculture, where she was responsible for facilitating the coordination of scientific leadership across the Department to ensure that research supported by, and scientific advice provided to, the Department and external stakeholders were held to the highest standards of intellectual rigor and scientific integrity. She also served as the Acting Director for USDA's National Institute of Food and Agriculture.

Dr. Jacobs-Young was a senior policy analyst for agriculture in the White House Office of Science and Technology Policy where she supported the President's science adviser and others within the Executive Office of the President on a variety of agricultural scientific activities and worked across the Federal Government to improve interagency cooperation and collaboration on high-priority scientific issues.

Dr. Jacobs-Young is a native of Georgia. She holds M.S. and Ph.D. degrees in Wood and Paper Science and a B.S. degree in Pulp and Paper Science and Technology from North Carolina State University. She also is a graduate of American University's Executive Leadership in Public Policy Implementation Program.

Please join me in welcoming Dr. Chavonda Jacobs-Young – we are pleased to have her on board.

Dr. Catherine Wotecki, Under Secretary and Chief Scientist for the U.S. Department of Agriculture

FAR-B *ad hoc* Finance Committee Audit Report —as of April 30, 2014

As requested, the *ad hoc* FAR-B Finance Committee performed an internal audit of the organization's financial record for the period including 2013-to March 2014. The Committee is composed of Jim Anderson, Richard Parry and Darwin Murrell. The Committee reviewed financial reports, bank statements, and other documents related to FAR-B's finances. In addition, the Committee interviewed the current FAR-B Treasurer, Richard Zimmerman, who provided all documents necessary for the audit. The Committee wishes to note that Dr Zimmerman organized a detailed set of records that greatly facilitated the Committee's work.

After review of the financial records, the Committee believes that all the organization's expenditures and receipts are appropriate and well supported by documentation. In conclusion, the formal reports from the Treasurer to the FAR-B Executive Board are accurate and transparent. It is also clear the Treasurer has been astute in managing FAR-B's funds, especially investments to maximize the organization's reserve funds.

Darwin Murrell, Chair
2014 FAR-B ad hoc Finance Committee

National Parasite Collection Transferred to Smithsonian

Over the past 120 years since its founding in 1892, the United States National Parasite Collection (NPC), a cornerstone of global and North American parasitology, has been maintained by scientists and curators of the Agricultural Research Service of the United States Department of

Agriculture (USDA). Initially held in Washington, D.C., for over 70 years the collection has been curated at ARS in Beltsville..

The NPC holdings include in excess of 100,000 catalogued specimen lots (potentially thousands of individuals per lot) of animal parasites focusing on helminths and to a lesser extent other groups; included about 3,000 holotypes and 7,000 type series. Historically among the most active parasite collections in the

world, annual growth is estimated to be between 1,000 and 1,500 specimen lots, and loan activity has been significant in support of a broad global community. In addition to the collections at the Harold W. Manter Laboratory of Parasitology (University of Nebraska, Lincoln) and the Parasitology Division, Museum of Southwestern Biology (University of New Mexico), the NPC is one of the largest museum repositories and archives for parasites in North America, and among the most significant in the world, serving as an irreplaceable resource for research programs emphasizing biodiversity and systematics of parasites and complex host-parasite systems.

Over the past 120 years since its founding in 1892, the United States National Parasite Collection (NPC), a cornerstone of global and North American parasitology, has been maintained by ARS scientists and curators. Initially held in Washington, D.C., for over 70 years the collection has been curated at the Beltsville Area Research Center in Maryland.

abscisic acid in plants are correlated with various environmental stressors and he developed a chemical analysis that allowed an unequivocal correlation between leaf development and indole-3-acetic acid levels in sugar beet leaves. Every summer for 25 years he mentored one or two undergraduate students in his laboratory.

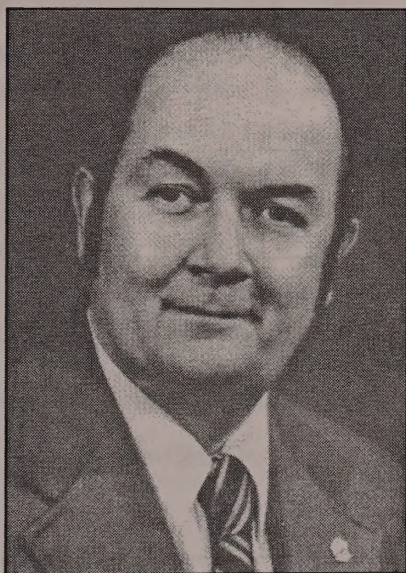
Terry earned a B.S. in chemistry from Southeastern Massachusetts University and both M.S. and Ph.D. degrees in organic chemistry from the University of Massachusetts at Amherst. As a member of the American Chemical Society (ACS) for 56 years, Terry was an active member of the Chemical Society of Washington (CSW) and the ACS. He served in many capacities and was elected as an ACS Fellow in 2010. He also received both the Community Service Award and the Charles L. Gordon Award from CSW. Terry was President of CSW in 1987, represented CSW as a Councilor for 25 years, started the Retired Chemists Group in 1987--and remained active in this group until his death--, was Committee Chairman for 27 years of the Leo Schubert Award for High School Chemistry Teaching, was Chairman of the Awards Committee, and organized the Meeting in Miniature for students. For ACS, Terry served for fifteen years each as member, chairman, and consultant on the Admissions Committee and the Membership Affairs Committee. He was also an active member of the Greater Washington Institute of Chemists for 33 years.

As a volunteer, his second great love was Toastmasters International, where he was an active member for 40 years. He rose through the governance ranks from Club President to District Governor of the Washington area in 1983-84. He helped found many clubs and was particularly proud of starting the first all-Distinguished Toastmaster (DTM) club in history.

Terry was born in Fall River, MA to Mabel (Burns) and Job Terry. He was raised and educated in the Fall River-Assonet area. Upon receiving his undergraduate degree, he served in the U.S. Army for two years, most of that time at Fort Myer, VA, before pursuing his graduate studies.

His funeral was held on November 23, 2013 in Fall River. He leaves behind many cousins and friends. Memorial donations in memory of Terry can be made to SOME (So Others Might Eat), or to the National Kidney Foundation, Inc.

IN MEMORIAM



Paul H. Terry

Paul H. Terry passed away suddenly on November 18, 2013 at his home in Beltsville, MD at 85 years of age. He was employed as a research organic chemist for 25 years at BARC. For the first half of his career he worked in the Chemosterilant Laboratory in research and devel-

opment of insect chemosterilants with low mammalian toxicity, developed two unusual and novel new classes of effective compounds, and earned an international reputation in his research area. The second half of his career was in the Plant Hormone Laboratory where he was involved in the development of a program on plant hormone analysis. His research successfully determined whether endogenous levels of

FAR-B BOARD OF DIRECTORS



Left to right: Jim Anderson, Essex Finney, Withers Horner, Dick Zimmerman, Jim Butcher, Dave Chitwood, Phyllis Martin, Lew Smith, K. Darwin Murrell, Allan Stoner, Dick Parry and Hank Becker.

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Call: 301-578-4098 • or visit: <http://www.far-b.org>
Email: farbboardod@yahoo.com

BELTSVILLE AREA DIRECTOR: Joseph Spence

Friends of Agricultural Research–Beltsville, Inc.
P.O. Box 1061 • Beltsville, MD 20704-1061



THE FAR-B NEWS

Dedicated to promoting the research and education programs of the BELTSVILLE AREA, Beltsville, MD

Friends of Agricultural Research-Beltsville, Incorporated P.O. Box 1061, Beltsville, MD 20704-1061

JANUARY 2015

Editor: Hank Becker

President's Message

Dear Friends and Colleagues,

The year 2014 was a year for change at the Henry A. Wallace Beltsville Agricultural Research Center. As you may recall, ARS reorganized at the beginning of this fiscal year and BARC and the North Atlantic Area were combined into one Area (Northeast Area) with the Area Office being retained in Beltsville. Beltsville is now referred to as the Henry A. Wallace Beltsville Agricultural Research Center (HACBARC) and is comprised of BARC and the Beltsville Human Nutrition Research Center. FAR-B will continue to support all aspects of the research efforts located at HACBARC.

FAR-B's draft budget for 2015 was approved at the December 10, 2014 meeting. Again, FAR-B is funding four summer high school interns (\$4,600 each) for the Beltsville Area. The Area office will develop a protocol for awarding these interns. It is FAR-B's intension that these internships provide meaningful research experiences for high school or college students so that they will consider science or an agriculturally-related career when they complete their formal education as well as provide high quality support to the SY.

The 2015 budget is a negative one again, i.e., we will be spending more than we take in. We anticipate an operating income of \$13,800 with operating expenses of \$32,800. The difference will come out of our reserve funds. We are always hopeful that we will get more retired employees joining and just as importantly getting actively working employee members (Associate member) and donations so that we can limit the use of our reserves. FAR-B is again a member of the CFC (40122).

I am proud to say, FAR-B co-sponsored numerous major events at BARC this past year. This included the support of the Beltsville Area Diversity Taskforce that included seven meeting throughout the year (see their report below). Also, we supported the Student Discovery Garden that had over 500 visitors this past year.

Science in Action!



FAR-B President, Jim Anderson, observes younger students at the Beltsville Academy.

Our youngest students heard a story about cows, talked about dairy foods, made butter from heavy cream, and then taste-tested their experiment on graham crackers. Older students assumed the role of chemists . . . producing glue from milk and then testing its strength against a commercial variety using several objective tests.

Problem, hypothesis, procedure, results, conclusion—the scientific method in action!

For the fourth year, FAR-B helped sponsor the Beltsville – University of Maryland Fall Symposium Trends in Agriculture held at the National Agricultural Library. This years symposium was Organic Production: Food, health and Ecosystems and was held November 13, 2014; 95 attended this event.

FAR-B members will again be judging Middle School Science Fair projects in Montgomery (March 14, 2015), and Prince George's Counties (March 21, 2015). Darwin Murrell handles the Montgomery County Fair

and John Teasdale handles the Prince George's Area County Fair which includes students from Calvert, Prince George's and Saint Mary's Counties. Judging Middle School County Science Fairs has been one of our outreach activities for the past eight years. There are lots of very bright young women and men at these science fairs, and we believe our small cash awards and our certificates help keep them interested in science. We give awards in five areas; Environmental Science, Plant Science, Animal Science, Microbiology/Health and Computer Science/Engineering. Each category has a first, second and third place gift card and a certificate. If you're interested in judging these young developing scientists, send Darwin (kdmurrell@comcast.net) or John (john.teasdale2@verizon.net) an email. We can use your help. And I guarantee you will enjoy visiting with these youngsters as they talk about their projects.

In April, FAR-B will again be hosting the luncheon for the BARC Poster Day and presenting awards to the top three posters presented by the High School Interns who are working in various BARC laboratories. The top prize is the **Vernon G. Pursel Student Scientific Achievement Award**.

The science trailer from the Maryland Agricultural Education Foundation returned to the Beltsville Academy under the joint sponsorship of FAR-B. FAR-B, along with the school and its PTA sponsored the trailer in the fall of 2014 (see story below).

In closing, please remember that it's time to send in your FAR-B membership dues. They are essential for FAR-B to continue our support of various activities at HACBARC. FAR-B participates in the Combined Federal Campaign (CFC # 40122)--our biggest single source of income for FAR-B.

FAR-B submitted application for participating in the 2015 drive, but will not know for several months about acceptance.

Wishing you all a Healthy, Happy and Prosperous New Year!

James Anderson, President

Area Director's Message

The Beltsville Area is well positioned to take advantage of the opportunities that I know will be coming this year.

On October 1, 2014 the former Beltsville Area (BA) and North Atlantic Area (NAA) have merged creating the Northeast Area (NEA). The NEA now includes Beltsville Agricultural Research Center (BARC), Beltsville Human Nutrition Research Center (BHNRC), US National Arboretum (USNA) and the former NAA, which encompasses 12 northeastern and Mid-Atlantic States from Maine to West Virginia, Virginia and Maryland. On October 6, I was joined in the Area Office by Dr. Allison Yates and Dr. Charles Onwulata, the two Associate Area Directors for NEA. After Allison's retirement in the end November 2014, I asked Dr. Ramon Jordan of USNA to serve as the Acting Associate Area Director (AAD). After his detail was completed, we were joined by Dr. Michael (Mickey) McGuire as the new Acting AAD on January 26. Mickey's detail will extend till July 17, 2015. In his permanent assignment, Dr. McGuire is an Associate Area Director for the Plain Area, Fort Collins, Colorado.

I firmly believe that our joint programs will attain new heights of excellence and impact. My optimism is rooted in the excellence of our employees both scientists and support staff. Regardless of our job titles, we are all involved in scientific research, albeit contributions we make may differ. However, they are all important and indispensable for our success. An organization is only as strong as its weakest link, so it is imperative that all parts of NEA, all the links, are as strong as they can be. The other source of my optimism is derived from the spirit of cooperation permeating our organization; I saw it displayed in various locations across the former BA and NAA. The culture of asking for help and providing help when asked is the key to conquering seemingly insurmountable obstacles. Finally, my optimism is rooted in the fact that the research programs of the former BA and NAA are highly complementary providing plenty of opportunities for synergy, leveraging resources, and building even more powerful research teams.

The last four months have been very demanding and challenging to all our employees. Not only did we deal with merging the cultures of the former Beltsville and North Atlantic Areas, but also we implemented far reaching changes in the performance appraisal and performance plan preparation processes. Moreover, due to new Departmental regulations,

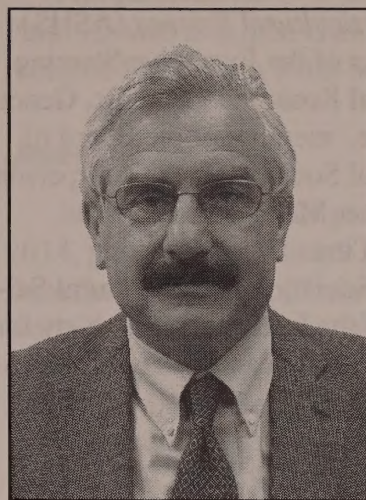
the latter two had to be accomplished in 6 instead of normal 10 weeks. In addition, we completed biological and hazardous material stand downs, and some of our locations were subjected to demanding OIG audits concerned with dissemination of scientific information. BARC, the largest agricultural center in the world, underwent a safety assessment. We passed these and many other challenges with flying colors despite incomplete staffing in many locations including the Area Office. During this challenging time, the NEA scientists continued producing transformational discoveries and excelled in technology transfer for which they were recognized on multiple occasions by ARS, USDA and other domestic and international organizations. ARS is very fortunate to benefit from the excellence and professionalism of the NEA employees.

During the referenced time, we recruited Dr. Naomi Fukagawa as the new Director of BHNRC. She will be joining the Center on April 5. Dr. Robert Moreau was appointed the Research Leader of the Eastern Regional Research Center in Wyndmoor, PA. Prior to that appointment he served as one of the Lead Scientists in that Unit. We are in advanced stages of recruiting a new Director for USNA and Assistant Director for BARC, two Executive Secretaries and Program Analysts in the Area Office.

By the year 2055, the world agriculture will have to double production to meet the demand for food and fiber partly because of population growth and partly because of the growth of standard of living caused by globalization. Technology created globalization and it is technology that will enable the U.S. agriculture to feed the Nation and contribute significantly to the world's food security, while successfully compete globally. This will have to be accomplished taking into account that American society is increasingly concerned with diet and health, organic foods, petroleum dependency, depletion of natural fisheries, soil, clean water and air. Food safety remains a defining issue in all aspects of the food system. Cost of agriculture production will be raising with inevitable increases in the cost of energy, and water availability for irrigation is an issue. I feel very strongly that the NEA will play a critical role and will make critical contributions to meeting these challenges.

Dariusz M. Swietlik, Area Director, NEA

NEA Director



Dr. Dariusz M. Swietlik is the new Director for the Northeast Area (NEA), Agricultural Research Service (ARS), U.S. Department of Agriculture (USDA) in Beltsville, Maryland. Prior to his current position, he served as the Director of North Atlantic Area and Director and Research Leader of the

USDA-ARS Appalachian Fruit Research Station in Kearneysville, WV. Before joining the USDA-ARS, Dr. Swietlik was a Full Professor of Plant Physiology with the Texas A&M University-Kingsville where he was involved in research, academic teaching and extension work on citrus crops. He also was the Assistant Director of the Citrus Center as well as the Texas A&M University Agricultural Research and Extension Center in Weslaco, TX.

Originally from Poland, he came to the United States in 1980 as a Senior Fulbright Scholar and conducted research on fruit crops at the USDA, ARS, Beltsville Agricultural Research Center in Beltsville, Maryland followed by a Research Associate (Post-Doctoral) position with the West Virginia University.

Dr. Swietlik holds a PhD degree in Pomology and an MS degree in Soil Chemistry and Plant Nutrition. During his scientific career, Dr. Swietlik strived to obtain a balance between basic and applied research on mineral nutrition, water relations, salinity, growth regulation, weed control, and freeze protection of deciduous fruit trees and citrus using whole plant physiology and molecular biology research tools. He published the results of his research in nearly 60 scientific technical papers and gave numerous invited scientific presentations nationally and internationally.

Dr. Swietlik is a recipient of the Faculty Award of Excellence from the Texas A&M University-Kingsville. He currently serves as a member of the Executive Steering Committee of the National Inter-agency Confederation for Biological Research comprised of 8 agencies of the U.S. Government. He

served as a Chairman of the Research Advisory Committee and a Board member of the International Arid Lands Consortium, Associate Editor of the *Journal American Society for Horticultural Science* (ASHS) and *HortScience*, member of the Executive Steering Committee of the National Rosaceae Genomic, Genetic, and Breeding Initiative, member of the Board of the American Pomological Society, and a Chairperson of Mineral Nutrition, Water Management, Plant Growth Regulation, and Citrus Crops Working Groups of the American Society for Horticultural Science. He is a member of the International Society for Horticultural Science and American Society for Horticultural Science.

Financial Report

In 2014, FAR-B had operating income of \$18,481 and expenses of \$31,352 with \$30,309 in reserve funds to cover the net loss, which was approved by the Board. In addition the investment income of \$2,594 was earned and reinvested. Operating income comprised of dues (\$4,450), registration fees for the Fourth Annual Northeast Area – University of Maryland Symposium (\$3,465), donations (\$6,624), and Combined Federal Campaign (\$3,942). Dues receipts declined slightly but the receipts from CFC contributions were restarted in 2014. Expenditures by category were research 68%, education 23%, outreach 5% and administrative 4%.

FAR-B funded four high school student interns at Beltsville in 2014. Other programs supported were activities of the Beltsville Diversity Task Force, the science enrichment program at the Beltsville Academy, the Beltsville Poster Day and awards at the middle school science fairs in Montgomery and Prince Georges counties. FAR-B also assisted with the Fourth Annual NEA-UMD Symposium that was held at the National Agriculture Library.

Richard Parry, Treasurer

Diversity Task Force

Dear FAR-B membership,

The Beltsville Area (BA) Diversity Taskforce once again extends a "Thank you" for your organization's support of our endeavors. Since 2008, our group has had the mission to provide support and leadership to the BA administration to ensure that the

research mission of the Agricultural Research Service is performed at the highest scientific level possible.

As you may know, employee organized and ran taskforce and committees are a part of the Department and Agency's initiatives associated with accountability, program delivery, and employment of minorities, which includes outreach, collaborations, special emphasis programs/observances and cultural transformation in support of ARS' civil rights goals.

In October 2014, the BA was reorganized and placed into the newly named Northeast Area. Our name is now NEA Diversity Taskforce Beltsville Area. The NEA is currently in the process of recruiting employees from the other locations to reignite or start diversity taskforces. We anticipate a meeting in the near future where we determine as a group how we can integrate and develop our programs and activities.

This was accomplished in no small part because of the support of FAR-B and its membership. We have recently had great success in the implementations of such outreach programs as:

- Cultural Heritage Month celebrations
- A flourishing Student Discovery Garden that had 350 visitors in 2014 and donated over 350 pounds of produce to a local food pantry.
- The BA put together last summer a learning experience for Hispanic Serving Institutions (HSI) students in cooperation with Dr. Lawrence (National Program Leader of the Hispanic-Serving Institutions Education). The BA Diversity Taskforce Leadership Advisory subcommittee and the ODEO Program Manager organized and provided Hispanic students with a two month learning experience that will prepare them for future USDA careers. Mentors were identified for 30 undergraduate and graduate, students from several HSIs, which included universities located in Puerto Rico, Florida, and Texas. The learning experience contributed to the students' knowledge, preparation and expertise leading to their future agricultural related careers. This program included an overview of our research programs, hands-on learning experiences, and group activities to enhance the interns' knowledge of research as it relates to ARS programs and future careers in agricultural research. This was a phenomenal learning experience for both students and mentors which contributed to the Area's goal of increasing Hispanic participation in the BA workforce.

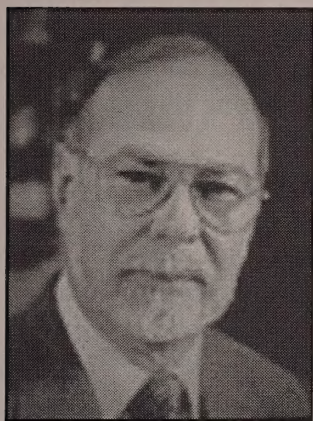
FAR-B members have helped make all of these endeavors successful with their constant support. We anticipate that our efforts will inspire a diverse community of future scientists to see the wealth of possibilities in Agricultural Sciences and FAR-B will be an integral part of that achievement. We applaud your dedication to promoting the importance of Agricultural Science through outreach.

2015 will be another year with new Special Emphasis programs, enlarging the number of students doing their internships in the BA from HSI institutions, and continuing tours of the Student Discovery Garden. The new administration for the NEA has expressed a willingness and eagerness to continue all our programs. We hope FAR-B can continue to support our future initiatives and endeavors.

Verneta Gaskins, *Diversity Task Force*

IN MEMORIAM

Phillip C. Kearney



Phillip C Kearney, 81, a biochemist, became a USDA research scientist specializing in the chemistry of pesticide behavior in soils, died June 8 at an assisted living facility in Melbourne, FL. Phil was a past President of FAR-B from 1996 until 1998. He was responsible for getting FAR-B into the CFC program. His death

was caused by complications from Alzheimer's disease diagnosed in 2007 said his wife Rita B. Kearney.

Phil was a resident of Laurel, MD and was born in Baltimore and worked for ARS from 1962 to 1995. He headed the ARS Pesticide Degradation Laboratory from 1965 to 1988 doing pioneering studies on how pesticides broke down in agro-ecosystems that contained various organisms and plants. He and/ or his lab discovered that microbes can be used to degrade oil spills.

From 1988 until his retirement in 1995 he served as director of the ARS Natural Resources Institute in Beltsville and in 1986 he was named the ARS scientist of the year. He was adjunct professor of chemistry and biochemistry at the University of Maryland from 1995 to 2010 and wrote more than 200 scientific pub-

lications and several books on pesticide chemistry and degradation.

Phil received his B.S. from U of MD, College Park. He was in Alpha Gamma Rho Fraternity. He received Ph. D from Penn State.

Joanne Holden

Joanne Holden, MS passed away on October 2, 2014. Joanne received her BS in Foods and Nutrition from the University of Delaware, Newark, DE. She worked for the University of Maryland Cooperative Extension Service in Frederick County before enrolling in the UMD Graduate School. She joined the ARS Beltsville Human Nutrition Research Center, in 1969 as a Support Scientist in the Carbohydrate Metabolism Laboratory where she conducted research on the effects of carbohydrate intake and metabolism while completing her MS degree in Human Nutrition Research.

Ms. Holden assisted in conducting some of the first (BHNRC) human feeding studies and the analysis of human biological samples. She then worked as a Research Nutritionist in the Food Composition Laboratory (now FCMDL), BHNRC for 20 years. She worked with Dr. Wayne Wolf and others to sample and analyze various types of foods for nutrient content, the results of which were included in the Human Nutrition Information Service (HNIS) National Nutrient Databank. Joanne developed food sampling plans for use in various FCL research projects as well as expert systems for evaluating the quality of analytical data for both inorganic and organic components in foods. This led to her interest in assessing data quality for newly recognized bioactive compounds such as flavonoids in foods.

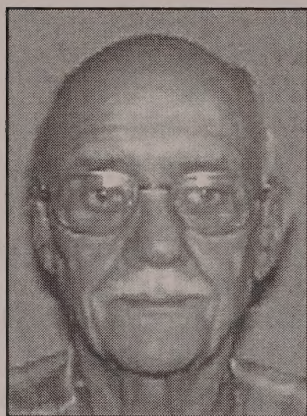
Joanne joined the Nutrient Data Laboratory (NDL) as Research Leader in 1995, providing leadership and coordination in the acquisition, evaluation, compilation and dissemination of food composition data and related research efforts. This included the National Nutrient Database for Standard Reference (SR), the authoritative source of U.S. food composition data. Her research interests in food sampling, bioactive compounds and the evaluation of data quality led to the development and coordination of the National Food and Nutrient Analysis Program (NFNAP), which has supported the generation of current, accurate original analytical data for ~2000 foods targeted as the most significant contributors of nutrients in the

US diet. She authored many publications and presentations on USDA food composition research.

Joanne served as the Co-Director of the International Postgraduate Course for the Production, Management, and Use of Food Composition Data between 1994 and 2005, which is coordinated and supported by the Food and Agriculture Organization (INFOODS), Rome, Italy, the Wageningen Agricultural University, Wageningen, The Netherlands and the European Food Information Research Program (EuroFIR), Norwich, U.K. This international course has trained more than 400 scientists from 85 countries since 1992; she taught in Europe, Asia, Latin America, and Africa to groups of analytical chemists, data compilers, and users of food composition data on the topics of food sampling, data quality evaluation, and the development of food composition databases and will be remembered all around the world.

She retired from ARS-USDA June 30, 2012

Russell Paul Kaniuka



He was born on September 17, 1925 in Philadelphia, PA to William and Katherine Kaniuka. The oldest of four siblings, Russell was raised in Philadelphia and educated in local public schools.

From 1936 to 1943 Russ spent his summers on his Aunt Annie's farm in Birchrunville, PA. These summers were among the happiest times of his life. He often said that his lifelong love of agriculture and the natural world was a direct result of his time on the farm.

Russell was drafted into the U.S. Army on April 1, 1944. He was in the Army Corps of Engineers and saw combat in the European theatre. He then served as a member of the occupation forces until 1946. After returning to the states he enrolled at Penn State University and received a BS in Agriculture in 1952.

In 1958 he began his graduate studies in the School of Journalism at Iowa State University. It was there that he met his future wife, Mary Jane ("M. J.") Corliss. They were married on August 13, 1959 in Belmont, MA. She died on September 27, 2009, one

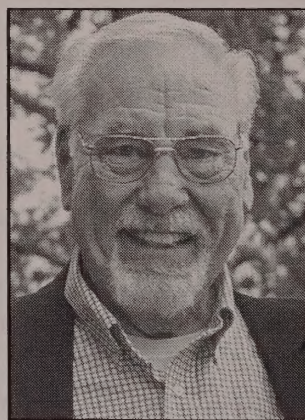
month after their 50th anniversary. Their only child, William Piers Kaniuka, was born on July 23, 1963.

Russ received an MA in Journalism in 1961. The following year he took a job in Washington D.C. at the Department of Agriculture as the editor of *Agricultural Research* magazine. He held this job from 1962 to 1976 and again from 1982 until his retirement in 1988. A highly competent editor, he freely shared his time and skills with many students, aspiring writers and journalists.

Russ dedicated much of his time to charitable activities. He was a board member of the Farmington Public Library and a tutor for the local chapter of Literacy Volunteers. He was also a great friend to the elderly and infirm. A more recent interest was the South Africa Partnership sponsored by the Mission at the Eastward. The Partnership fosters the development of home gardens and small-scale agriculture. His greatest passions were reading and gardening. He could often be found either with a book on the patio or working the soil under the watchful supervision of one or more of his beloved cats.

Russ Kaniuka died at home in the company of his family on March 31, 2014 after a long illness.

Robert Winfield "Bob" Norton



Robert Winfield "Bob" Norton died peacefully in his sleep Tuesday, September 23, 2014, with his wife at his side. He was born October 16, 1936 in Petaluma, CA to the late Margaret and Pappy Norton. Bob had two sisters, Margaret Jean Woll (husband John Woll); and Mary Anne Greenlund (deceased).

After high school, Bob enrolled at California Polytechnic State University (Cal Poly) in San Luis Obispo. He interrupted his studies by enlisting in the United States Army and honorably served for four years. He returned to Cal Poly, completed his degree in journalism and soon began his career in public relations.

Bob was a lifetime member of the Association for Communication Excellence in Agriculture, Natural

Resources, and Life and Human Sciences (ACE). He retired from the USDA in 1997 after 39 years of federal service. His last post was director of the ARS Information staff. Earlier positions included speechwriter to three Secretaries of Agriculture, director of information for what is now the Food Safety and Inspection Service and, prior to that, the Animal and Plant Health Inspection Service, and deputy director of Information for the Agricultural Marketing Service.

He received ACE's Pioneer Award in 1967 and USDA's Superior Service award three times. He also served as the ACE D.C. region's treasurer and coordinated the onsite ACE awards ceremony at the 1988 United States Agricultural Communicators' Congress (USACC).

John Moore Ruth, Ph.D.

John Moore Ruth, Ph.D. was very active in the Chemical Society of Washington (CSW) and at the national level of the American Chemical Society (ACS). In the 1960s he was a pioneer in the emerging field of mass spectrometry and its application in organic chemistry. Dr. Ruth passed away at 90 years of age in the early morning of Saturday, June 7, 2014, at Washington Adventist Hospital in Tacoma Park, MD. He was born to the late Thomas Cook Ruth and Lorena Moore Ruth on May 26, 1924 in Chatham County, NC. He received his Ph.D. in Chemistry from the University of North Carolina, Chapel Hill, NC. Dr. Ruth spent the early part of his career working on nuclear weapons projects at Oakridge, TN and Los Alamos, NM National Laboratories. Eventually, he settled in College Park, MD working for ARS at Beltsville, MD, until his retirement.

Dr. Ruth pioneered the application of mass spectrometry in the analysis of organic compounds before the advent of hyphenated analytical methods, which combine chromatography with mass spectrometry. He operated and refined a high resolution mass spectrometer in the 1960s and assisted and advised in the use of this new analytical technique to scientists not only in USDA laboratories at Beltsville but also others at neighboring universities and federal research laboratories. He was a contributor to several research papers involving the application of mass spectrometry and chromatography for structural elucidation of agricultural chemicals, including insect and plant growth

regulators among others. He was a scholar who authored numerous scientific publications in the field of agricultural chemicals.

For many years Dr. Ruth actively served the CSW. He was President in 1981 and served as Counselor for more than 25 years. He also served on several CSW Committees. He was a strong advocate for employment protection of chemical professionals and advocated against layoffs in industry and government. While Assistant Editor for *The Capital Chemist*, Dr. Ruth was the first CSW member to speak openly in support of the local area chemists when government laboratories were victims of cutbacks about three decades ago. He received the Charles Gordon Award in 1985 for his contributions to CSW.

At the national level of ACS, Dr. Ruth joined the movement initiated by Alan Nixon, William Bailey, and Attila Pavlath in the 1970s to transform the ACS to a more member-oriented society. As Dennis Chamot, a close colleague, has summarized this new movement directed at benefiting members. "John was an early and active supporter of the professional movement in ACS that has transformed the ACS from a narrowly focused scientific society into a professional organization that offers a wide range of services to chemists and other chemical professionals throughout their professional lives." Dr. Ruth served on the ACS Committee on Public Relations and on the Committee on Economic Status which has been renamed the Committee on Economic and Professional Activities (CEPA). He was an active member of the Division of Professional Relations (DPR) in its formative years and served as its Chair in 1992. DPR presented him with the Henry Hill Award in 2000 for his tireless efforts to uplift the professional lives of chemists and chemical engineers. Another important contribution from Dr. Ruth was his active support through the petition process of worthy candidates who were not chosen by the ACS nomination process for national office. He campaigned for the election of petition candidates that included Attila Pavlath, Ann Nalley, and Dianne Schmidt, who were elected to the office of ACS President.

Dr. Ruth was also active in the American Institute of Chemists (AIC) and served on the Board of Directors and as Chairman of its local section known as the District of Columbia Institute of Chemists (DCIC).

Ben Hill Stroud

On Saturday September 7, 2014 Dr. Ben Stroud DVM, passed away at a Front Royal, VA Nursing Home. Dr. Stroud was the Veterinarian at BARC for 25 years until his retirement in 2001. Dr. Stroud had been in poor health for the last 6 months.

Dt. Stroud was born April 29, 1928 in Baldwin County, GA. Son of the late Arthur John and Roslyn Stroud, he served in the US Marine Corp in China during the Korean War.

He was a member of the American Veterinarian Association, he graduated from the University of Florida and Auburn University. He most recently served as the Chief Veterinary for USDA ARS in Beltsville, MD.

Paul Hatheway Terry

Paul passed away suddenly at his home in Beltsville, MD on November 18, 2013. Paul was employed as an organic chemist for 25 years Beltsville, MD. For many decades he was an active member of the American Chemical Society, the Chemical Society of Washington, and Toastmasters International.

His funeral was held on November 23, 2013 in Fall River, MA.

Shiow Wang



Shiow Ying (Shyr) Wang, 73, passed away on Monday, August 11, 2014, at her daughter's home in Saint Louis, MO, from brain cancer. She died peacefully, surrounded by her loving family.

Shiow Ying was born in Taiwan on September 21, 1940. She was the eldest of six sisters and two brothers. She attended National Taiwan University,

where she met her husband-to-be, Chien Yi. She traveled to the United States in 1964 to further her education, receiving a Masters Degree from the University of California, Davis, and a Ph.D. in plant physiology at Oregon State University.

Shiow Ying began her research career in plant biochemistry and physiology at the Mid-Columbia Agricultural Experiment Station in Hood River, OR, and later worked as a plant biochemist and physiologist for USDA in Beltsville. Her research on the antioxidant content in fruits was recognized internationally.



Left to right: Jim Anderson, Essex Finney, Withers Horner, Dick Zimmerman, Jim Butcher, Dave Chitwood, Phyllis Martin, Lew Smith, K. Darwin Murrell, Allan Stoner, Dick Parry and Hank Becker.

F A R - B B O A R D O F D I R E C T O R S

President: **James Anderson** janderso1@mac.com
 Vice President: **K. Darwin Murrell** kdmurrell@comcast.net
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 CFC: **Lew Smith** lws406@comcast.net
 BARC Outreach: **Jim Butcher** jim.hickory@verizon.net
 BARC Liaison: **David Chitwood** david.chitwood@ars.usda.gov
 Publicity: **Hank Becker** hankbecker3@verizon.net
 Webmaster: **Jim Mowder** jdmowder@yahoo.com

Board Members: **Withers Horner** wizlizlob@earthlink.net
Phyllis Martin pawmartin24@gmail.com
Richard Zimmerman rhz1415@verizon.net

TO CONTACT THE FAR-B BOARD

Call: 301-578-4098 • or visit: <http://www.far-b.org>
 Email: farbboardod@yahoo.com

BELTSVILLE AREA DIRECTOR: Dariusz Swietlik

Friends of Agricultural Research-Beltsville, Inc.
 P.O. Box 1061 • Beltsville, MD 20704-1061



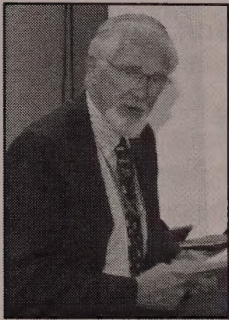
THE FAR-B NEWS

Dedicated to promoting the research and education programs of the BELTSVILLE AREA, Beltsville, MD

Friends of Agricultural Research-Beltsville, Incorporated P.O. Box 1061, Beltsville, MD 20704-1061

JUNE 2015

Editor: Hank Becker



President's Message

The Annual Meeting of Friends of Agricultural Research – Beltsville was held May 19 in the Conference Room of Building 005, BARC-W. About 60 members and guests attended. The keynote speaker was Dr. Naomi Fukagawa, the new Di-

rector of the Beltsville Human Nutrition Research Center. The title of her talk was “Forty-four days and counting...BHNRC update.” (See her bio on page 8).

She is very optimistic about doing joint research on a whole farm basis. Her presentation created lots of interesting discussion.

She was followed on the program by Dr. Dariusz Swietlik, NE Area Director. He spoke on “The Current State of the Northeast Area and a Look into the Future.” His message was Beltsville can’t do everything. He is hopeful that there can be more collaborative efforts between scientists within the whole area. Again, there was good discussion.

I was not able to present the *Vernon G. Pursel Student Scientific Achievement Award* this year because Poster Day was held the day after our Annual Meeting.

FAR-B was again able to finance four summer interns in 2014 for scientists in the Beltsville Area. However, the Area Office decided to divide the funding six ways and have the Laboratories picked up the difference.

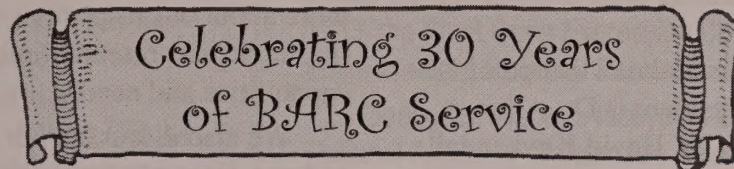
FAR-B funding supported Dr. Michel Cavigelli (Sustainable Agriculture Systems Laboratory) who

chose Alexandra Barrett, a student at Washington University, as the FAR-B funded Summer Intern; Dr. Jill Demers (Systematic Mycology and Microbiology Laboratory) who chose Lindsay Garnett as the FAR-B funded Summer intern; Dr. Xiangwu Nou (Environmental Microbial & Food Safety Laboratory) who chose Lydia Nichols-Russell as the FAR-B funded Summer intern; Dr. Savi Natarajan (Soybean Genomics & Improvement Laboratory) who chose Travis Latchman as the FAR-B funded Summer intern; Dr. Pei Chen (Food Composition and Method Development Laboratory) who chose Mengliang Zhang, and Dr. Harry Dawson (Diet, Genomics, and Immunology Laboratory) who chose Paula Wang as the FAR-B funded Summer Intern.

Again this year, FAR-B continued to judge Middle School Science Fairs in Montgomery and Prince George’s Counties where gift certificates were given to first, second and third place winners in Plant Science, Animal Science, Natural Resources, Medical/Public Health, and Computer Science. We provided refreshments

and/or lunches for Poster Day Participants and the 6th annual Leaders of Tomorrow – end of summer event. We also supported seven programs sponsored by the BA Diversity Task Force, and cosponsored the Maryland Agriculture Education Foundation Science Trailer at the Beltsville Academy. FAR-B helped with the 4th Annual BA-UMD Fall Symposium, *Trends in Agriculture. Organic Agriculture: Food, health and Ecosystems.*

On March 27, FAR-B submitted written Outside Testimony prepared for the Senate and for the U.S. House of Representatives Appropriations Committee,



FAR-B members attending the Annual Meeting last May were captivated and engaged with the topics of discussion.

Subcommittee on Agriculture, Rural Development, Food, and Drug Administration, and Related Agencies. This testimony was made possible by the dedicated work of Board members James Butcher and K. Darwin Murrell. Thank you Jim B. and Darwin. FAR-B's testimony will be available on our web site (www.far-b.org/Testimony.html) soon.

FARB total membership is about what it was last year. This includes full members, patrons, and associate members. We invite anyone who is interested in promoting the research programs of the Beltsville Area including all USDA retirees and active USDA employees to join FAR-B. Full membership (non-employees of USDA) is \$30, Patron membership is \$100, and Associate membership (active employees) is \$15. All FAR-B activities are paid for by membership dues, donations, left over funds from workshops, symposia, etc., that FAR-B helps cosponsor. FAR-B is very pleased that we are now back in the CFC. We want to thank the employees who so generously donated through CFC and on line.

Election of FAR-B officers and new Board of Directors was held. Our new President is Dr. Allan Stoner. New board member is Dr. David Kuykendall. We are very pleased to have David aboard. The proposed changes in the Bylaws were past. We have eliminated the Vice President and replaced that position with a Past President position. The Past President will be in charge when the President is unable to attend meetings, etc. We are still looking to find new Board members to serve FAR-B and help support the research efforts at the Henry A. Wallace Beltsville Agricultural Research Center. Please contact me or other Board members if you are interested in serving on the BOD's.

As this is my last report to FAR-B as President, I'd like to thank the BOD's and members of FAR-B for all their support during the past 4 years. I especially want to thank Jim Butcher for all he has done on keeping FAR-B in the loop for the Beltsville Academy, with maintaining communications with the Washington Baltimore Chamber of Commerce, and getting the Outside Testimony ready for Congress. Thank you Jim for all you have done to keep Beltsville in the lime light. Also, I'd like to thank Hank Becker who is responsible for publishing FAR-B's Newsletter. Without his dedicated work in getting

folks to get their material submitted, FAR-B would be without this Newsletter to let the membership know what is going on. Thank you Hank for your outstanding contribution to the Newsletter, but also for volunteering in being the go-to-person for making sure we have food for luncheons, etc. That made my life so much easier.

James Anderson, President

Area Director's Message

Since my last report in February, the Northeast Area (NEA) continued to be extremely busy executing our research programs, hiring new scientific and support personnel and developing new, unified procedures. On April 20-22, we held our first NEA Center Directors and Research Leaders Meeting under the overarching theme "Working Together." Our goals were to introduce members of the leadership teams from the former BA and NAA to one another, learn more about our respective research programs, scientific expertise, research infrastructure and equipment capabilities and needs.

We also discussed our current practices and procedures, lines of communications, existing bottlenecks and the locations' expectations in terms of services provided by the Area Office, Eastern Business Service Center and selected components of the Administrative and Financial Management (AFM). We also heard an informative and stimulating presentation by Randy Olson, a marine biologist-turned-filmmaker, on the challenges to communicate science to the general public and scientific community. Based on the feedback received from the attendees, it was a successful meeting that is expected to create more productive working environment through increased opportunities for collaboration and resource sharing across the entire NEA.

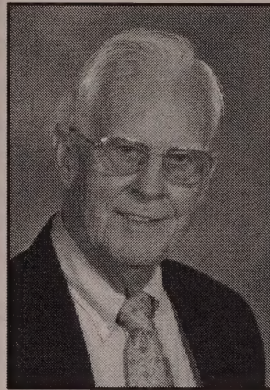
On May 20, the National Agricultural Library hosted the Twenty-Six Annual Beltsville Agricultural Research Center (BARC) Poster Day. This year's event was very well attended and characterized by high quality papers. It also was historical as it marked the first Poster Day after the merger of the former Beltsville Area (BA) with the North Atlantic Area (NAA). The merger broadened the scope of the event by offering new Research Scientists, Visiting Scientists and Post-doctoral Research Associates from out-

side Beltsville, the opportunity to present their latest research results. In fact, for the first time, we had posters from the Foreign Plant Disease-Weed Science Research Unit in Frederick, MD. We thank the Friends of Agriculture Research- Beltsville for their support and financially sponsoring the event.

Dr. Richard T. Olsen was appointed the Director of the USDA-ARS United States National Arboretum (USNA) in Washington DC, effective May 3. This appointment was enthusiastically received by our stakeholders and customers. Richard is a recognized international leader in the public garden arena. He possesses deep scientific expertise and practical knowledge that made him uniquely qualified to lead the USNA. Until his appointment, Dr. Olsen served as a Research Geneticists and Lead Scientist in the Floral and Nursery Plant Research Unit (FNPRU) at the USNA. He also served as Acting Director of the USNA in 2014 and most recently as Acting Assistant Director of the USDA-ARS BARC.

Ms. Donna Geiman and Ms. Dallas Rausch have joined the Northeast Area Office as new NEA Program Analysts effective May 3. These two positions are critical to proper operation of programmatic part of the Area Office. Prior to joining the Area Office, Ms. Geiman served as an Agreements Technical Assistant for the BARC and a Program Support Assistant for the Hydrology and Remote Sensing Laboratory at BARC. Ms. Rausch worked as a Program Support Assistant in the Systematic Mycology and Microbiology Laboratory and Genetic Improvement of Fruits and Vegetables Lab at BARC. She also served on a long detail as Program Analyst in the Northeast Area Office.

Dariusz M. Swietlik, Area Director, NEA



IN MEMORIAM

Terry B. Kinney, Jr.

Former ARS Administrator Terry B. Kinney, Jr., died on April 4, 2015, in Gastonia, NC. He was 89 years old.

Dr. Kinney, who joined ARS in 1961 as a poultry geneticist scientist, became Administrator in 1980 and served until his retirement in 1988.

Dr. Kinney's tenure as Administrator saw a restructuring and streamlining of the organization that included the headquarters staff; a reduction in the number of regional areas from 25 to 8; the separation of the Cooperative Research Service and the Extension Service (now parts of NIFA) from ARS; and the reintroduction of Human Nutrition research. Dr. Kinney also supported efforts to establish a new research unit within the ARS that would use molecular genetic approaches to advance American agriculture. In 1983, the Plant Gene Expression Center was established adjacent to the Western Regional Research Center (WRRRC) in Albany, CA.

During Dr. Kinney's last years in office, he commissioned the National Academy of Science's Board on Agriculture to investigate the peer review of research at ARS following a round of public criticism of the way ARS research was planned and approved. The July 1987 study, "Improving Research through Peer Review," concluded that what ARS called a peer review system at that time was not true peer review and that it should be strengthened. Dr. Kinney oversaw the implementation of several of the panel's recommendations, including the wider use of non-ARS reviewers, revision of ARS' policy to clarify review guidelines, and the requirement that researchers report past accomplishments and significant publications.

A native of Norfolk, MA, Dr. Kinney served in the U.S. Army during World War II. He grew up on his family's poultry farm near Boston, and held degrees from the University of Massachusetts and a doctorate in genetics from the University of Minnesota. In 1988, the French government honored Kinney as a Commander of Agricultural Merit for his efforts to strengthen scientific ties between the two countries. Two years earlier he received a \$25,000 award and a presidential citation for his work at ARS.

Survivors include his wife, Carolyn Harbuck Kinney, six children, and 11 grandchildren. Letters of condolences can be sent to the family in care of McLean Funeral Directors, 700 South New Hope Road, Gastonia, NC 28054.

FAR-B Seeks Candidates for the Aileen Lee Support Staff Award

Two years ago Aileen Lee left a generous bequest to FAR-B that the board voted to be used to support training and advancement of Office Professionals at Beltsville. The purpose of this award is to promote the advancement of office professionals through training--defined in the broadest sense to include leadership courses, details and other forms of specialized training. Approximately \$5000 yearly has been approved by the FAR-B board to support this training.



Office professionals in the geographic Beltsville location are eligible for this award. This includes the Henry A. Wallace Beltsville Agricultural Center, Human Nutrition and National Arboretum Labs located at Beltsville. Award will be based on the goals of the applicant and the need for the training. Applicants can be self-nominated or nominated by their supervisor. Initial approval will be needed from both the applicant's supervisor and the Area office. Final selection will be made by a FAR-B committee. At the end of their training, awardees will give a presentation to the FAR-B board based on the training they received.

Anyone interested in applying should contact FAR-B or any Board member.

Phyllis Martin

Financial Report

In the first six months 2015 FAR-B had operating income of \$21,170. This included \$4,666 from dues and donations, \$6,400 from the Combined Federal Campaign, and \$10,104 from the reserve funds. Many expenses for 2015 will occur in the second half of the year. Some of the planned expenses will include: support for four student interns at Beltsville laboratories (\$18,400); awards for winners of the Montgomery and Prince Georges County Science Fairs (\$800); support of the Diversity Task Force (\$2,500); and various workshops/seminars to held at Beltsville (about \$10,000). On May 20, FAR-B again supported the Henry A. Wallace Scientific Poster

event, by funding the awards (first place \$300, second place \$200, and third place \$100) and also providing refreshments for participants. We are planning for our support activities to cost \$10,000 more than income received. This will be a smaller deficit than in 2014. The FAR-B Board of Directors strongly believes that we can operate successfully by spending some of our reserves to better support the agriculture research and outreach needs at Beltsville.

Richard Parry, Treasurer

CFC Update

FAR-B thanks the many federal employees who donated to FAR-B through the National Capital Area Combined Federal Campaign in 2014. Donations exceeded \$6,000, largely due to one very generous donor. The CFC has implemented improvements to increase efficiency. Those improvements include direct deposit, nationwide listing of charities, and automated 'thank you' to those who donated electronically. FAR-B has been approved to participate in the 2015 campaign and our charity number remains 20122.

Lew Smith

USDA Agency Retools Its Monthly Science News Magazine

Agricultural Research magazine has been a flagship publication of the USDA's Agricultural Research Service since 1953. In April, ARS debuts a new, all-digital version of the magazine called *AgResearch* that will make better use of information delivery and technology to meet the needs of an increasingly tech-savvy, time-pressed global audience.

In this and subsequent monthly issues, "Site visitors will encounter a new look and content layout to complement the ag-research reporting that's come to define the magazine over the years," according to ARS Administrator Chavonda Jacobs-Young. ARS is the chief intramural scientific research agency of USDA.

The monthly magazine is designed for a diverse, lay, non-scientific audience. The information will be useful for those interested in food and agriculture, including farmers/ranchers, commodity and industry groups, Federal and private researchers, policymakers (including Congressional members), regulatory agen-

cies and the American public. The magazine has also had a worldwide audience.

The new *AgResearch* magazine can be found at <http://agresearchmag.ars.usda.gov>. Users are encouraged to sign up to receive email alerts when a new issue is posted each month by sending an email that says, "Subscribe" in the subject line to agresearchmag@ars.usda.gov.

Jan Suszkiw, ARS Information Staff

26th Annual Poster Day and the Vern Pursel Award



Board member, Phyllis Martin (far left) and Area Director, Dariusz M. Swietlik (far right) pose with Poster Day Winners (from left to right): Elizabeth Johnson, Joshua Kawasaki, Pendo Abbo and Emma Thrift.

The 26th Annual Beltsville Poster Day was held May 20, at the National Agricultural Library. There was a great turnout of presenters and interested observers. There were 13 High School Student Posters and 72 ARS intern posters.

At BARC Poster Day, FAR-B treasurer Richard Parry presented the Vernon G. Purcel Award for 1st place to Elizabeth Johnson from Eleanor Roosevelt High School. Ms. Johnson also received a \$300 reward for her poster on "Looking for Mutants in Diploid Strawberries." She studied the genetics of a mutant she named "petiolulong" and set up two different thermotolerance screens for mutants with increased thermotolerance for high temperatures. The project found that the petiolulong gene is heritable and identified two potentially thermo-tolerant mutants. Her mentor was Dr. Janet Slovin of the Genetic Improvement of Fruit and Vegetables Lab.

Ms. Johnson, recently graduated with over a 4.0

cumulative GPA. In the fall, she will be attending Wellesley College, where she intends on majoring in either Environmental Science or Biology. She is a member of the National Honor Society and was the Vice President of the Latin Honor Society.

There was a tie for second place honors by Joshua Kawasaki and Pendo Abbo from Eleanor Roosevelt High School, who split a prize of \$200 but worked independently on "Honeybee Stress: Pesticide and Varroa Challenge." Their mentor was Dr. Judy Chen.

Third place award (\$100) was received by Emma Thrift for her poster "Pheromone Aided Trap Cropping of the Harlequin Bug." Her project focused on finding effective, and ecological ways to manage this destructive stink bug. Her mentor was Megan Herlihy and Don Weber, research entomologist and lead scientist for the ARS Invasive Insect Biocontrol and Behavior Laboratory.

Five days earlier on May 15, Ms. Thrift was a Grand Award Winner. She won 4th prize of \$500 in the Plant Sciences category on her Harlequin Bug control study. The competition was held in Pittsburgh, PA, by the Society for Science and the Public, in partnership with the Intel Foundation. Student winners are ninth through twelfth graders who earned the right to compete at the Intel ISEF 2015 by winning a top prize at a local, regional, state or national science fair.

FAR-B also sponsored the lunch for the young scientists which helped encourage interactions and discussions between the participants.

Richard Parry, Treasurer



Elizabeth Johnson from Eleanor Roosevelt High School. received a \$300 reward for her poster on "Looking for Mutants in Diploid Strawberries."

Diversity Task Force Update

The Beltsville Area Diversity Task Force would like to extend a sincere “Thank you” for FAR-B’s support of our recent endeavors. Since 2008, our group has had the mission to provide support and leadership to the Beltsville Area Administration to ensure that the research mission of ARS is preformed at the highest scientific level possible. We firmly believed that the creation and maintenance of a workforce that represents the nation’s and surrounding community’s increasingly diverse population will ultimately aid in the achievement of that goal.

As of October 2015, we had a name change to being the Northeast Area (NEA) Diversity Taskforce. Since our rebirth 7-years ago, we have been awarded the ARS EEO/CR award twice for our efforts in the Area. This was accomplished in no small part because of the support of FAR-B and its membership. We have recently had great success in the implementations of such outreach programs as:

- Cultural Heritage Month celebrations (See article below on Back History speaker.)
- A flourishing Student Discovery Garden that averages 500 visitors a year and produce donations to a local food pantry of half a ton per year
- Continuation of summer internships for students from Hispanic Serving Institutions who are supported by grants given to their university from NIFA. Forty students will work in the BA this summer—an increase from thirty-two last year with some students returning from last year. Students come here from Universities in Puerto Rico, Texas and Florida.



Students from Bel Pre Elementary enjoy a fun-filled, educational trip to the Student Discovery Garden located on BARC-West. Established in 2010, the garden has produced more than 2000 lbs. of produce that was donated to local charities and food pantries.



Sumptuous refreshments donated by Area staff caps off the Diversity Task Force celebration of Asian American and Pacific Islander Heritage month this past May. This year’s theme was entitled: “Many Cultures, One Voice: Promote Equality and Inclusion.”

FAR-B members have helped make all of these endeavors successful with their constant support. We anticipate that our efforts will inspire a diverse community of future scientists to see the wealth of possibilities in Agricultural Sciences and FAR-B will be an integral part of that achievement. We applaud your dedication to promoting the importance of Agricultural Science through outreach. We look forward to future collaborations.

Verneta Gaskins, Diversity Task Force

Diversity Task Force Features Quilters

On February 23, in honor of Black History Month, the *ARS Northeast Area Diversity Taskforce* hosted a lunch and learn presentation about the Quilts of Gee’s Bend that featured guest speaker and quilter Ms. Levern Allen. The quilting tradition in Boykin, AL (also known as Gee’s Bend) goes back to the 19th century, when the community was the site of a cotton plantation owned by a Joseph Gee.

Perhaps influenced in part by patterned African textiles, female slaves pieced together strips of cloth to make bedcovers. Throughout the post-bellum years and into the 20th century, Gee’s Bend women made quilts to keep themselves and their children warm in unheated shacks that lacked running water, telephones and electricity. Along the way they developed a dis-

tinctive style, noted for its lively improvisations and geometric simplicity.

The quilts have been exhibited at the Museum of Fine Arts, Houston, the Indianapolis Museum of Art, the Philadelphia Museum of Art, and the Whitney Museum of American art, among others. They have been compared to versions of works by *Matisse* and *Klee* arising in the rural South.



Ms. Lavern Allen shares the treasure of quilting throughout African American history with an enthralled audience at this year's Black History Month celebration.

FAR-B Continues to Support AG Science On Wheels

Carolyn Menne, an instructor with the Maryland Agricultural Education Foundation (MAEF), quieted the kindergartners seated in the aisle of the outreach organization's Mobile Science Laboratory, parked at the Beltsville Academy in Beltsville, MD.

She held up a purple Baltimore Ravens T-shirt, prompting some kids to cheer, while others looked on politely. (It turned out that they were Washington fans.) The shirt was one of about a dozen items Menne used to illustrate the connections between agriculture and the students' daily lives—including

popular sporting events they like to watch, such as a Ravens football game.

The shirt, she explained, is made of the soft natural fibers of a crop called cotton. "The cotton growers grow [the cotton] and then sell it to the T-shirt makers," Menne said.

The class was actually one of 20 half-hour lessons Menne and other MAEF instructors taught over 4 days to the school's diverse students, grades K-5, as part of a unique partnership with FAR-B and USDA's Agricultural Research Service (ARS) Henry A. Wallace Beltsville Agricultural Research Center (BARC), located a few minutes away from the school.

The event is part of partnership that FAR-B and BARC have with the school—and marks the 11th consecutive year of the partnership between FAR-B and BARC, and the third consecutive year with MAEF—noted FAR-B past president Jim Anderson, a former BARC researcher. This fall will mark the 12th year of this FAR-B sponsored event.

"Beltsville Academy has had a long tradition of partnering with BARC and FAR-B to enrich the science curriculum at our school," said Leslie Lowe, the school's principal. "The Mobile Lab is one of our most anticipated activities every year—by both students and teachers. The community connection and the support our school receives from FAR-B is an invaluable asset."

This year's volunteers included Susan Bentz, a horticulturist with ARS's U.S. National Arboretum, and Joe Alfieri, a physical scientist with ARS's Hydrology and Remote Sensing Laboratory.

Alfieri assisted MAEF instructor Jane Howe with "Fiber Up for a Clean Sweep," a lesson in which fourth- and fifth-graders learned about the nutritional importance of soluble and insoluble fiber.

The combination of science and agriculture under one roof—such as that of the Mobile Science Laboratory—is a unique opportunity to educate students about two important and intertwined topics that might otherwise escape their attention, noted Anderson.

"I like it when they get excited. I want them to think about what agriculture means to their daily lives from the minute they get up in the morning until the minute they go to bed at night," said Howe. "From the crayons they use to the ingredients in the foods they eat, somehow and somewhere a farmer made their life better."

BARC Human Nutrition Research Center Gets New Director

Naomi K. Fukagawa, MD, PhD, assumed the position of Director of the USDA Human Nutrition Research Center, in Beltsville, MD, this Spring 2015. She was a Professor of Medicine and Acting Director of the Gerontology Unit at the University of Vermont, Burlington, VT. She is a board-certified pediatrician and an expert in nutritional biochemistry and metabolism, including protein and energy metabolism; oxidants and antioxidants; and the role of diet in aging and chronic diseases, such as *diabetes mellitus*.

Dr. Fukagawa has served on numerous NIH review panels, served as the Chairman of the NIH study section for General Clinical Research Centers and recently completed a 5-year term on the NIH Integrated Physiol-



Dr. Naomi Fukagawa.

ogy of Obesity and Diabetes Study Section. Her membership in the *American Society for Clinical Investigation*, election as President of the *American Society for Clinical Nutrition* (*American Society for Nutrition*), and service as an Associate Editor for the *American Journal of Clinical Nutrition*, as Editor-in-Chief of *Nutrition Reviews*, and as Vice-Chair of the 2010 Dietary Guidelines Advisory Committee of the USDA and HHS speak to her national/international recognition.

She received her MD degree from Northwestern University and her PhD from the Massachusetts Institute of Technology in Cambridge. Her clinical training included residency at the Children's Hospital of Philadelphia, University of Pennsylvania, Chief Residency at the University of Vermont, and nutrition/ gerontology fellowships at the Children's Hospital and Beth Israel Hospital, Harvard Medical School.



Left to right: Jim Anderson, Richard Parry, Dave Chitwood, Dick Zimmerman, David Kuykendall, Phyllis Martin, Essex Finney, Allan Stoner, Hank Becker, Jim Butcher and Lew Smith (absent: K. Darwin Murrell.)

F A R - B B O A R D O F D I R E C T O R S

President: **Allan Stoner** stonerfam@earthlink.net
 Past President: **James Anderson** janderson1940@gmail.com
 Special Advisor: **K. Darwin Murrell** kdmurrell@comcast.net

Treasurer: **Richard Parry** rmparry@verizon.net
 Special Advisor: **Essex Finney** eefinney2@msn.com
 CFC: **Lew Smith** lws406@comcast.net
 BARC Outreach: **Jim Butcher** jim.hickory@verizon.net
 BARC Liaison: **David Chitwood** david.chitwood@ars.usda.gov
 Publicity: **Hank Becker** hankbecker3@verizon.net
 Webmaster: **Jim Mowder** jdmowder@yahoo.com
 Board Members: **Withers Horner** wizlizlob@embarqmail.com
 David Kuykendall davekuykendall6@gmail.com
 Phyllis Martin pawmartin24@gmail.com
 Richard Zimmerman rhz1415@verizon.net

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Friends of Agricultural Research-Beltsville, Inc.
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THE FAR-B NEWS

Dedicated to promoting the research and education programs of the BELTSVILLE AREA, Beltsville, MD

Friends of Agricultural Research-Beltsville, Incorporated P.O. Box 1061, Beltsville, MD 20704-1061

JANUARY 2016

Editor: Hank Becker

Area Director's Message

Quite a few positive things happened in the Henry W. Wallace Beltsville Agricultural Research Center since my last report in the June's issue of the FAR-B Newsletter. On October 19, 2015, BARC was designated a National Historic Chemical Landmark by the American Chemical Society. The discovery and isolation of phytochrome by scientists at the Beltsville Agriculture Research Center (BARC) was one of the most important developments in plant science of the 20th century.

It took a 41-year hunt from 1918 to 1959 to identify this pigment-containing protein that the BARC team named phytochrome. Red light switches phytochrome to a biologically active form, while far red light reverses it to a biologically inactive form. This "biological switch" allows seed to germinate at the barest glimpse of light, plants to sense their neighbors, and sun-loving plants to overtop their neighbors. This switch also is responsible for the plants of same species to bloom at exactly the same time every year, and for some species to bloom early (tomatoes) while some others late (chrysanthemums) in the growing season.

The official ceremony, which took place in the main auditorium at BARC, was attended among the others by Dr. Chavonda Jacobs-Young, ARS Administrator; Mr. Joseph Bartenfelder, Maryland Secretary of Agriculture; Mr. Rushern Baker III, County Executive, Prince Georges County, and Dr. Pat N. Confalone, Chair, ACS Board of Directors and a former Vice President of DuPont Chemical Company. Also present was Dr. Karl Norris, a retired ARS scientist and a member of the original ARS phytochrome discovery team.

The ceremony was followed by a symposium hosted by BARC on past, present and future research related to phytochrome. The keynote speaker was Dr. Peter H.

Quail, professor, Department of Plant and Microbial Biology, University of California, Berkeley and research director of the Plant Gene Expression Center, Albany, CA.

Last December, Congress passed the Consolidated Appropriation Act of 2016, also known as the omnibus bill. It is favorable for ARS. It includes

\$1,143,825,000 for the Salaries & Expenses account--an increase of \$11.2 million above the FY 2015 operating level. The Bill also provides \$212,101,000 for the Buildings and Facilities account. As a result of this appropriation, the US National Arboretum has received a \$350,000 programmatic increase and BARC \$37 million to renovate Building 307 located on the east side of the BARC campus. The funding of all the other programs in Beltsville remained at the Fiscal Year 2015 operating levels, which is a very positive development considering the current tight budgetary environment.

Last December, Dr. Dawn Gundersen-Rindal completed her 3.5 months long detail to the position of Acting Associate Area Director in NEA. Her professionalism, dedication, and exceptional work ethic significantly contributed to and benefited the NEA programs. Dr. Gundersen-Rindal resumed her function as Research Leader of the Invasive Insect Biocontrol and Behavior Laboratory in BARC.

In January 3, 2016, Dr. Vangimalla (VR) Reddy was detailed to the position of Acting Associate Area Director in NEA for 90 days. Dr. Reddy has been the Research Leader and Supervisory Research Plant Physiologist for the USDA-ARS-BARC Crop Systems and Global Change Laboratory (CSGCL) and its predecessor laboratories since 1995. His research focuses on crop responses to climate change in terms of photosynthesis, respiration, transpiration, carbon and nitrogen



Engineer Karl Norris displays the dual monochromator spectrophotometer which made history with its rapid and precise assays of phytochrome.

metabolism and growth. He uses the results of his studies to develop mechanistic growth simulation models and computer-aided farm decision-support systems for major crops such as corn, cotton, soybean, potato, wheat, rice and others. He has authored and co-authored over 180 publications in peer-reviewed journals, several book chapters and two books.

Effective January 10, 2016, Dr. LeAnn Blomberg was appointed the Assistant Director of the Beltsville Agricultural Research Center in Beltsville, MD. She joined the USDA-ARS, BARC as a postdoctoral fellow in the Biotechnology and Germplasm Laboratory in 2002 and in 2004 became a Research Scientist in the same Unit. Following the formation of the Animal Biosciences and Biotechnology Laboratory, Dr. Blomberg served as Lead Scientist for a swine project before becoming the Laboratory's Research Leader in 2010. She holds an undergraduate degree in Biology from John Brown University, Siloam Springs, AK. She received a Ph.D. in Physiology and Biophysics from Georgetown University, Washington, D.C. in 2001. Prior to joining ARS, Dr. Blomberg conducted research at NIH on various aspects of human development, particularly postnatal airway development. Dr. Blomberg's research at ARS has focused on specific aspects of swine reproductive efficiency, encompassing embryo through neonatal development. She was the first to perform in-depth gene expression analysis on porcine embryos, not only reporting pre-implantation stage specific differences, but also demonstrating influence of the uterine environment. We are very pleased that Dr. Blomberg has assumed this very important leadership position.

Dariusz M. Swietlik, Area Director, NEA

Financial Report

In 2015, FAR-B had operating income of \$23,818 and expenses of \$31,390 with \$35,452 in reserve funds to cover the net loss, which was approved by the Board. In addition the investment income of \$2,436 was earned and reinvested. Operating income comprised of dues (\$5,141), individual donations (\$620), and Combined Federal Campaign (\$6,376). Dues receipts increased slightly and the receipts from CFC contributions also increased.

FAR-B helped the ARS National Germplasm Resources Laboratory and the APHIS Plant Quarantine program host the WERA-20 multistate program of public and private sector scientists meeting on virus and virus-like diseases of tree fruits, small fruits and grapevines (see article pg. 6). FAR-B also supported the agency and the American Chemical Society in the

celebration and seminar on the discovery of phytochrome.

FAR-B funded four high school student interns at Beltsville in 2015 (see article pg. 7). Other programs supported were activities of the Beltsville Diversity Task Force, the science enrichment program at the Beltsville Academy, the Beltsville Poster Day and funded award prizes for the winners at the middle school science fairs in Montgomery and Prince George's counties.

Richard Parry, Treasurer

President's Message

Although I have been involved in FAR-B activities for several years, after being elected president, I decided to delve back in FAR-B's history a bit. The first thing that I discovered is that FAR-B is 30 years old. In late 1985, Beltsville science icons Morton Beroza, Victor Boswell, Warren Shaw, Russell Steere, Jane Wall, and Martin Weiss drafted and signed the Articles of Incorporation that created the FAR-B Corporation. The Articles listed 13 purposes for creation of the organizations, all of which were to support the program, facilities, equipment, and needs of ARS and USDA in Beltsville.

Certainly times have changed, but the current FAR-B board of Directors remains as committed as ever to supporting the Beltsville facility and its programs. Except for aiding in the conduct of an annual symposia and publishing the proceedings, the activities of FAR-B have changed little in 30 years. The biggest change has been the availability of financial resources. The decline in the number of scientists and changing nature of the Beltsville research programs has made it increasingly difficult to raise funds. Private industry and non-profit organizations have for various reasons become more reluctant to contribute to support Beltsville programs and the aging and declining numbers of retirees and potential personal members has gradually resulted in declining resources.

Nevertheless, we continue to support Beltsville by providing annual written testimony to Congress, provide financing for student interns, support the annual poster day, provide funding for a wide range of diversity and community outreach programs, and assist the Area Director and management units as special needs arise. As you read the following pages you will get a good feel for many of these programs that FAR-B supports.

As I close, I want to invite any of you who have an interest and think you can help, to consider joining

MEMBERSHIP RENEWAL APPLICATION

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us on the FAR-B Board of Directors. Please give me a call. We only meet for a couple of hours, 10 times a year, so it's not a huge commitment of time, but can be very rewarding.

Alan Stoner, President

CFC Update

FAR-B submitted application to the National Capital Area Combined Federal Campaign to participate in the 2016 Campaign. FAR-B's charity number will likely remain the same as last year, 40122. Charities accepted for the 2016 Campaign will be notified by mid-summer. This can be followed on the web at www.NCACFC.com book of 2016 Charities.

Lew Smith, CFC

American Chemical Society Honors BARC as National Historic Chemical Landmark

The discovery of phytochrome by scientists at the USDA Beltsville Agriculture Research Center was honored as a National Historic Chemical Landmark by the American Chemical Society (ACS). Phytochrome is recognized as one of the universal regulators of plant physiology and growth.

It took a 41-year hunt from 1918 to 1959 to identify this pigment-containing protein, which the BARC team named phytochrome. Red light switches phytochrome to a biologically active form, while far red light reverses it to a biologically inactive form, a process that controls germination, growth and flowering.

"Phytochrome was one of the most important discoveries in plant science of the 20th century, making possible many valuable leaps forward for agricultural science, such as growing crops in new seasons and latitudes and even creating new ways to protect plants from pests," said ARS Administrator Chavonda Jacobs-Young at a ceremony to mark the award. BARC is part of ARS, USDA's chief intramural scientific research agency.

For example, knowledge of phytochrome, and related photoperiodism, enabled soybean varieties to be bred to mature at staggered dates, boosting the value and importance of soybeans as a crop.

Awareness of phytochrome also brought the discovery that exposing chrysanthemums to light for just minutes in the middle of night prevents flowering. This allowed growers to time blooming, and

turned mums into one of the country's most valuable ornamentals with US. sales of more than \$135 million a year.

"The discovery of phytochrome explains how plants germinate, grow and flower in predictable cycles over the course of a year," said Pat N. Confolone, chair of the ACS Board of Directors. "This extraordinary collaboration between physiologists, biologists, chemists and other scientists at USDA demonstrates the importance of federal research in the fundamental sciences to unlock nature's most powerful mysteries." ACS, the world's largest scientific society, founded the National Historic Chemical Landmarks program in 1992 to recognize important milestones in chemical research.

The ceremony to mark this honor was followed by a symposium hosted by BARC on past, present and future research related to phytochrome. The keynote speaker was Peter H. Quail, professor, Department of Plant and Microbial Biology, University of California, Berkeley and research director of the Plant Gene Expression Center, Albany, CA. His talk was titled *A Pigment of the Imagination*. Also speaking was Karl Norris, a member of the original ARS phytochrome discovery team and the developer of near-infrared reflectance spectroscopy, which can quantify the chemical composition of substances using certain light wavelengths.

FAR-B's contributions included work on planning this celebration of the discovery of Phytochrome and providing financial assistance for the luncheon and speaker travel expenses.

Kim Kaplan, ARS Information Staff

Diversity Task Force Update

The NEA Diversity Task Force-Beltsville thanks FAR-B for your organization's support of our endeavors. Since 2008, our group has had the mission to provide support and leadership to the NEA-Beltsville administration to ensure that the research mission of ARS is performed at the highest scientific level possible.

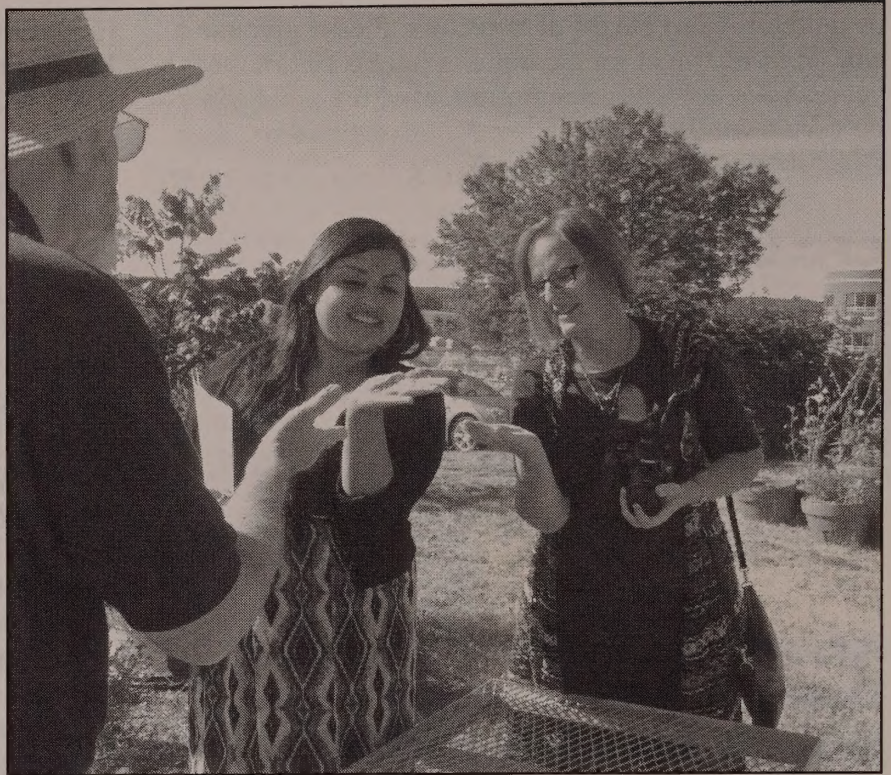
The Task Force is employee organized and Task Force committees are a part of the Department and Agency's initiatives associated with accountability, program delivery, and employment of minorities--which includes outreach, collaborations, special emphasis programs/observances and cultural transformation in support of ARS' civil rights goals.

This was accomplished in no small part because of the support of **FAR-B** and its membership. We have recently had great success in the implementations of such outreach programs as:

- Cultural Heritage Month celebrations.
- A flourishing Student Discovery Garden that attracted 800 visitors in 2015 and donated over 900 pounds of produce to a local food pantry. Located next to building 006 on BARC west), the SDG celebrated its fifth year and continues to prosper and grow. This year, the garden hosted over 800 students, including the entire school of Berwyn Heights (grades K to 6) who toured the garden in early June. The SDG features diverse research over broad disciplines, from container gardens, to medicinal plants, to biofuels, to nutrition, to ornamentals. Such an effort is designed to attract and inspire students of all ages to consider a career in plant sciences and continue the 100-year tradition of ARS. The SDG is an all-volunteer effort. Technicians, scientists, current employees and FAR-B retirees come together—to work, plant, improve, educate, advocate and weed. Every group of students the garden host is unique and diverse. They include students from Coahoma Community College in Clarksville, MS to a group of teachers (FDA summer training program for teachers). The garden recently hosted the White House's Council of Women and Girls (Champions of Change) and in October hosted a workshop for Prince Georges County 4H members for the second time this year.

Since opening in 2010, the garden has received over 2,500 student visitors and donated over a ton of produce to local food kitchens. The SDG is open to anyone and there is a self-guiding tour. As it celebrates the SDGs fifth anniversary, the group sincerely thanks the volunteers who have given unstintingly of their time, their labor and their ideas and FAR-B for their support.

- The Area put together last summer a learning experience for Hispanic Serving Institutions (HSI) students in cooperation with Dr. Lawrence (National Program Leader of the Hispanic-Serving Institutions Education). The Diversity Taskforce Leadership Advisory subcommittee and the ODEO Program Manager organized and provided Hispanic students with a two month learning experience that will prepare them for future USDA careers. Mentors were identified for 40 undergraduate and graduate, students from several HSIs, which included universities located in



ARS scientist Matt Greenstone examines a caterpillar with other visitors from the White House.

Puerto Rico, Florida, and Texas. The learning experience contributed to the students' knowledge, preparation and expertise leading to their future agricultural related careers. This program included an overview of our research programs, hands-on learning experiences, and group activities to enhance the interns' knowledge of research as it relates to ARS programs and future careers in agricultural research. This was a phenomenal learning experience for both students and mentors which contributed to the Area's goal of increasing Hispanic participation in the BA workforce.

- The Leadership Advisory subcommittee also organized and sponsored the Hispanic-Serving Institutions Grants Program New Project Directors' Training in December 2015. After the morning program and lunch coordinated by FAR-B, the attendees presented their posters which described their proposed research. After the poster session tours of various BA labs were given. There were 44 Project Directors and 18 students attending from 27 different HSIs. We believe the program was a great opportunity to share the work that is being done in ARS and to learn about the HSIs.

FAR-B members have helped make all of these endeavors successful with their constant support. We anticipate that our efforts will inspire a diverse com-

munity of future scientists to see the wealth of possibilities in Agricultural Sciences and **FAR-B** will be an integral part of that achievement. We applaud your dedication to promoting the importance of Agricultural Science through outreach.

2016 will be another year with new Special Emphasis programs, continuing to offer internships for HSI students, and tours of the Student Discovery Garden. We hope **FAR-B** will continue to support our future initiatives and endeavors.

Martha Tomecek, Chair NEA Diversity Task Force and Plant Physiologist at the BARC Crop Systems and Global Change Labs



Task Force member Ann Simpkins discusses the garden with a visitor from the White House's Council of Women and Girls (Champions of Change).

BARC Scientist Is Sammie Medal Winner

ARS Molecular Biologist at BARC, Dr. Hyun Soon Lillehoj received the 2015 Career Achievement Medal for "her pioneering scientific discoveries on treatment for commercial poultry that lessen the use of antibiotics and make it safer to eat poultry."

The Partnership for Public Service has released the names of the 2015 Samuel J. Heyman Service to America Medal winners. The "Sammie" awards, as they are known within the federal workforce, are considered to be among the most prestigious honors for U.S. civil servants. Categories range from Federal Employee of the Year and Career Achievement Medal to the Management Excellence and International Affairs medals.

Dr. Lillehoj said, "The Sammies are important for letting the public know the work we do at the federal research laboratories."

Dr. Lillehoj received her B.S. degree in Biology from the University of Hartford, M.S. degree in Microbiology from the University of Connecticut, and Ph.D. in Immunology from Wayne State University, School of Medicine. After graduation, she was a NIH post-doctoral fellow in the Department of Immunology and Microbiology, Wayne State University where she conducted research on the immunology of prostate cancer and immunogenetics of autoimmune diseases. In 1981, she was appointed as a staff fellow in the Laboratory of Immunology, NIAID, NIH where she studied T-cell immunity.

Since 1984, Dr. Lillehoj has worked at the BARC. Since joining ARS, she has progressively risen in the ranks to where she is now highest grade level, Super-grade. Her research career has focused on the immunobiology of host pathogen interactions, vaccine development, mucosal immunology, and immunogenetics. Dr. Lillehoj developed the first set of mouse monoclonal antibodies detecting chicken lymphocyte subpopulations that have been commercialized and used by poultry scientists world-wide and have been instrumental for investigation of avian cell-mediated immunity. More recently, she constructed the first chicken intestinal cDNA microarray which has been of seminal importance in national and international poultry genomics research.

FAR-B Continues to Support AG Science Students

During the week of November 30 to December 3, the Maryland Agricultural Education Foundation's Mobile Science Laboratory (MSL), using the joint sponsorship of FAR-B, the Beltsville Academy Public School, and the school Parent Teachers Association, presented one-hour agricultural science demonstration projects to some 722 students from 28 classes, grades K-5.

Grades K-2 learned about connecting Maryland farmers, farm animals, and crops to food and clothing. Grades 3-5 learned about testing to measure properties of candy. MSL teacher-instructor June Kron said she was astonished to have received the on-hands support of Beltsville scientists, who included Naomi Fukagawa, Rose Hammond, Eric Handy, Peter Thomson, Janet Slovíd, Mimi Jackson, and Benjamin Rosenthal.

The cost of the outreach program was borne by FAR-B, the School, and the PTA. Each will pay one-third of a \$1,800 fee to bring the MSL to the school.



The theme this year was the MLS Aquatics Lab--one of three mobile science labs managed and operated by the Maryland Agricultural Education Foundation (MAEF). For one-week, MLS instructors lead students through hands-on scientific activities where they learned about agricultural products, aquatics/conservation and food and fiber. MSL instructors—usually retired school teachers—presented selected, age-appropriate agricultural science projects to grades K through 5. FAR-B scientists and members as well as Beltsville scientists volunteered their time and expertise to assist MLS instructors in leading students in through scientific investigations.

Grades K - 2nd participated in Here, There, and Everywhere. Students connected selected farm crops and animals to the products they produce and then used map skills to highlight counties that are the highest producers.

Grades 3rd - 5th participated in Candy Science Investigation. Students act as food scientists as they discovered the properties of some of their favorite candies using a chemical test that bubbles and fizzes. Ingredient cards were used to inform them if their predictions are correct.

In a separate activity, the school's 8th grade science honors class gratefully accepted an invitation to attend the ACS Phytochrome Symposium at BARC on October 21. School Principal Leslie Lowe confirms that teachers and students alike were excited and looking forward to these activities. She coordinated students' symposium attendance details with Beltsville's Jim Poulos.

Jim Butcher, BARC Outreach

FARB Sponsored Research on Fruits

FAR-B helped the USDA-ARS National Germplasm Resources Laboratory and USDA-APHIS Plant Germplasm Quarantine program host the annual meeting of the WERA-20 committee at BARC on July 6-9, 2015.

WERA-20 is a multistate project coordinated from the Western Agricultural Experiment Station Directors Office. Public and private sector scientists conducting research on virus and virus-like diseases of deciduous tree fruits, small fruits, and grapevines meet annually to share research information and plan collaborations.

In addition to the scientific talks, two days of the 2015 meeting were dedicated to a workshop discussing the opportunities and challenges for using next generation sequencing technologies in plant quarantine and clean stock service programs. Next generation sequencing (NGS), also called high throughput sequencing, is the latest technological advancement for sequencing genomes. It achieves significantly more read coverage and therefore generates more data from a single sequencing reaction than older methods. Gigabytes of data can be obtained and this creates challenges for computational algorithms to assemble and analyze the sequence data. The burgeoning field of bioinformatics is essential to help connect this data to biological events. NGS is being used throughout BARC to study plant and animal genomes and gene functioning. As the technology matures and its costs decline, the WERA-20 group and its stake-

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holders are exploring the technique for routine pathogen detection. This powerful tool makes it possible to detect virus-specific nucleic acids, of both known and unknown diseases, in infected plants. This creates tremendous opportunities to detect pathogens with more sensitivity and speed than existing techniques, some of which can take years to complete.

Such technological advances create challenges for regulators, and numerous officials from APHIS and state departments of agriculture attended the meeting. All agreed that ongoing dialogue among researchers,

regulators, and stakeholders are essential for balancing our common goal of facilitating agricultural production while minimizing the threats caused by plant pathogens.

It was a productive meeting with about sixty in attendance. Guests enjoyed a wonderful group dinner at the U.S. National Arboretum one evening. FAR-B was glad to help sponsor this important professional event at BARC and salutes the organizers on a successful conference.

Thank you note to FAR-B for Summer Intern

I just wanted to express how very much I appreciate FAR-B's expression of support for my program in the form of funds to sustain the summer research of Brandon Adams.

Brandon is a graduate of Flowers High School who worked with us throughout his senior year and also during the summer prior to his freshman year at Cornell University, where he is studying animal science. Brandon assisted Detiger Dunams-Morel in characterizing *Trichinella* derived from a variety of wild carnivores in order to better understand the diversity and epidemiology of trichinellosis.

For 13 years, Detiger Dunams-Morel has served as a Biological Science Technician, and now as Support Scientist for my program in the molecular systematics, population genetics, and epidemiology of foodborne zoonotic parasites (emphases: *Trichinella spiralis*, *Toxoplasma gondii*, various species of *Sarcocystis*).

Support scientist, Detiger Dunams-Morel, served as Brandon's principal mentor, coach and cheerleader. Neither Brandon's senior-year project nor his

subsequent efforts would have been possible without her.

Ms. Dunams-Morel earned her Bachelors from the University of California, Irvine and a Masters in Bioinformatics from the University of Maryland while working for ARS (and with ARS assistance).

***Benjamin Rosenthal, Supervisory Zoologist
and Research Leader for the Animal Parasitic
Disease Laboratory at BARC***



Support scientist Detiger Dunams-Morel and FARB intern Brandon Adams.

IN MEMORIAM

John C. Bouma

John Charles Bouma, long-time resident of Beltsville, died June 8, 2015. He lived 87 years--73 of them with diabetes. His childhood years were spent in Gambrills, where his father worked at the Naval Academy dairy. He had two younger sisters, Emma and Gertrude. The family moved to Beltsville in 1942 when his father got a job at USDA in the cattle "maternity barn."

John graduated from Laurel High School in 1944 and then earned his bachelor's degree at the University of Maryland. He earned a Master's in Agriculture Marketing in 1949, working on a project at USDA. This led to his employment as a marketing specialist with ARS, first in Washington D.C., and later in Hyattsville and Beltsville.

At the time of the reorganization of ARS, John was working in the Transportation and Facilities Research Division (TFRD) in Hyattsville. With the 1972 reorganization, employees in the MQRD at Beltsville and in the TFRD in Hyattsville were combined into a new group called the Agricultural Marketing Research Institute (AMRI) in Beltsville. At that point, Bouma was appointed Chief of the Market Operations Research Laboratory where he provided leadership for research sys-

tems and costs for marketing groceries from producers and manufacturers to wholesale warehouses and retail stores.

John received a USDA Meritorious Service Award in 1964, and later contributed to development of the UPC scanners (bar codes) that are now used in stores worldwide.

Dr. Robert R. Oltjen

Dr. Robert R. Oltjen died December 12, 2015 in Sykesville, MD. He had a long career with ARS, starting as a research animal scientist in the Ruminant Nutrition Laboratory at Beltsville. Later, he was appointed Center Director of the U.S. Meat Animal Research Center in Clay Center, NB. In the latter part of the 1980s, Dr. Oltjen was asked to return to Beltsville. He then served as an Associate Deputy Administrator of the ARS National Program Staff where he provided leadership for improving the efficiency of livestock, poultry and aquacultural production.

With his dedication to excellence, breath of research experience, and commitment to agency goals and objectives, he served both the National Program staff and ARS with distinction. He had a wonderful personality and sense of humor. His colleagues remember him as being direct and forthright but always cooperative and willing to work with

others to solve pressing agency and national problems. He retired from ARS in 1996.

Judy McBride

On September 24, 2015, Judith "Judy" L. McBride passed away at the age of 74. Judy received a BS in zoology, pursued her master's degree in zoology and studied journalism at University of Maryland. For many years, she worked as an ARS science writer and was the sole reporter covering all of ARS's human nutrition research, which required her to be knowledgeable about the work of hundreds of scientists at six major ARS locations across the country.

Findings from that diverse work appeared in hundreds of Judy's news articles, magazine features, and her quarterly newsletter, *Food & Nutrition Research Briefs*, which she compiled and edited for many years. Judy continued skillfully interpreting technical research for lay readers worldwide until her retirement from ARS about 11 years ago.

Then Judy's life opened to expanded possibilities. She began her hypnotherapy practice and continued with massage and other hands-on techniques for easing other people's problems and pain. She founded the Lighthouse Hypnosis Center in Annapolis to care for her patients.

F A R - B B O A R D O F D I R E C T O R S

President: **Allan Stoner** stonerfam@earthlink.net
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Treasurer: **Richard Parry** rmparry@verizon.net
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 BARC Outreach: **Jim Butcher** jim.hickory@verizon.net
 BARC Liaison: **David Chitwood** david.chitwood@ars.usda.gov
 Publicity: **Hank Becker** hankbecker3@verizon.net
 Webmaster: **Tasha Sprague** SpragueT@gmail.com
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David Kuykendall davekuykendall6@gmail.com
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Email: farbboardod@yahoo.com

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JUNE 2016

Editor: Hank Becker

President's Message

The FAR-B annual membership meeting was held May 10 on the Beltsville campus. The large turnout of FAR-B members and Beltsville employees heard presentations by Dr. Sally Schneider, ARS Deputy Administrator for Natural Resources and Sustainable Agricultural Systems and Dr. Dariusz Swietlik, Director, ARS Northeast Area. Dr. Schneider discussed the "ARS Grand Challenge" that has a goal of "Transforming Agriculture to Deliver a 20% Increase in Quality Food Availability at 20% Lower Environment Impact by 2025. Her slide presentation outlined the roles of the ARS Design, Definition, Planning, and Research Implementation Teams in attempting to achieve this goal. Dr. Swietlik discussed "The Status of Beltsville and the Northeast Area." Following Drs. Schneider and Swietlik presentations, I gave a brief report of FAR-B's financial status and recent activities.

As I planned for the annual meeting, I compiled a list of activities that FAR-B was involved in during the past 12 months. Although I may have overlooked some, I think I came up with a rather complete listing of projects. Most of the projects have been described in some detail in this or the January 2016 newsletter, but it is interesting to see them in one list.

An annual activity of FAR-B is the submission of written testimony to the U.S. Congress supporting the Beltsville programs and facilities. In March 2016, FAR-B Board of Director members Jim Butcher, Darwin Murrell, Essex Finney and Jim Anderson prepared testimony that was submitted to the Senate and House of Representatives Subcommittees on Agriculture, Rural Development, Food and Drug Administration, and Related Agencies. Copies of the testimony were also provided to all members of the Maryland congressional delegation. This year's testimony called for an annual appropriation to address long-delayed essential maintenance and repairs to Beltsville facilities. It also called for support of funding increases to enhance four of the Center's research programs identified in the President's Fiscal Year 2017 budget. The specific programs includ-

ed: Resilient Crops that Respond and Adapt to Climate Change; Reduce Vulnerability of Agro-Ecosystems to Climate Change; Combatting Antimicrobial Resistance; and Safe and Abundant Water Supplies.

Also, during the past year FAR-B provided funds to support four high school interns to work with scientists in the BARC and BHNRC. In addition to funding interns, at the annual Beltsville Poster Day, FAR-B recognized three high school interns for their outstanding research projects and awarded them cash prizes. Rachel Blume was awarded the *Vernon G Pursel Student Scientific Achievement Award* for her 1st place poster. In addition to a certificate, the award included a \$300 check. Second and third place winners were Asha Pawar and Nicholas Randolph, who received \$200 and \$100 prizes respectively. FAR-B was also pleased to provide a ca-



Paul Sebesta, Acting Associate Northeast Area Director and Allan Stoner, FARB President, present recipient Rachel Blume with the 2016 Vern Pursel award for her poster entitled: "The Effectiveness of Remote Sensing on the Prediction of biomass of Wintertime Cover Crops." Rachel goes to Herbert Flowers High School. Her Mentor is Dean Hively with Hydrology and Remotes Sensing.

tered lunch to all Poster Day participants and guests.

A particularly exciting event that FAR-B was involved in during the past 12 months was the ceremony, lunch and symposium associated with the American Chemical Society designation of BARC as a National Historic Chemical Landmark for its 41 year role in the discovery, isolation and understanding of the role of the

pigment containing protein that they named phytochrome. FAR-B contributed financially and to the planning of the event. We were particularly pleased that Karl Norris, the last surviving member of the team of scientists involved in the original research on phytochrome and a member of FAR-B, was present and spoke at the official ceremony and subsequent symposium. Among many others, the official ceremony was attended by Dr. Chavonda Jacobs –Young, ARS Administrator; Mr. Joseph Bartenfelder, Maryland Secretary of Agriculture; Mr. Rushern Baker III, County Executive, Prince Georges County; and Dr. Pat Confalone, Chair, American Chemical Society Board of Directors.

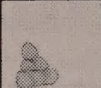
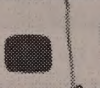
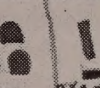
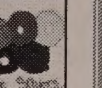
During the past 12 months, FAR-B supported financially numerous programs organized by the Beltsville Diversity Taskforce. These included numerous special emphasis diversity programs open to all Beltsville employees; a two month Hispanic Serving Institutions Learning Experience for 40 undergraduate and graduate students from across the country; and the Student Discovery Garden that hosted over 800 students from the Beltsville area.

In addition to the above activities, FAR-B continues to assist Beltsville management, laboratories and other units in organizing and hosting meetings, workshops, etc. For example, during the past year FAR-B provided financial support for the Northeast Area Council of Office Professional Team Building Workshop and assisted the National Germplasm Laboratory host a committee meeting involving scientists from across the country involved in plant germplasm quarantine issues.

Although not in direct support of specific Beltsville programs, FAR-B was active in the area of community outreach. For the 8th year we contributed financial support and teaching assistance for the week-long visit of the Maryland Agricultural Education Foundation Mobile Science Laboratory to the Beltsville Academy where over 700 K-5 students were exposed to presentations on agriculture, farm animals and crops. All students in grades 3 -5 also acted as food scientists as they investigated properties of some of their favorite candies using a chemical test that bubbles and fizzes. In addition, the budding scientists learned about developing and testing research hypotheses. Also, in the area of community outreach, FAR-B provided judges and cash prizes for students participating in the Prince Georges and Montgomery county middle school annual science fairs.

Candy Science

Beltsville Academy Student Posters
Representing Grades K-5

					
Gum head A few bubbles	Sour patch kids A lot of bubbles	Starburst A few bubbles	Gum Drop They have a few bubbles	Pike They have a lot of bubbles	Lifebuoy Oodles of bubbles
They do have acid	They do have acid	Yes they do have acid	They do have acid	They do have acid	NO
They do have skin left on surface	They do have skin left on surface	They do have skin left on surface	They do have skin left on surface	They do have skin left on surface	They do have skin left on surface
They do have oil and wax	They do have oil and wax	They do have oil and wax	They do have oil and wax	They do have oil and wax	They do have oil and wax

This student poster stems from an ongoing partnership among the Beltsville Academy, FAR-B, and the Henry A. Wallace Beltsville Agricultural Research Center. The purpose of this partnership is to bring agricultural science to a mostly Hispanic and minority student population grades K-5. Grades 3-5 participated in the lesson "Candy Science Investigations." Students acted as food scientists as they investigated properties of some of their favorite candies using a chemical test that bubbles and fizzes.

Developing a list of projects that FAR-B was involved in during the past year made me realize the impact that FAR-B was able to make with a limited financial commitment, the input of our 11 member Board of Directors listed on the back page, and a small number of volunteers. Without question, Beltsville research and area school programs got a large bang for our buck. It is hard to imagine a more competent and dedicated group than our current Board members who are willing to spend time and energy to help Beltsville programs and educating young people about science and agriculture. They all deserve a very special vote of thanks.

This brings me to two final points that are problems that are looming on the horizon for FAR-B. First, FAR-B's membership is aging and we are experiencing difficulties recruiting new patron, personal and associate members. A part of this is the declining number of scientists and support staff at Beltsville and fewer retirees over recent years, thus a continually declining number of people in the pool to draw members from. Any help that you can provide in recruiting people in the Patron, Personal and Associate member-

ship categories would be helpful to FAR-B to continue to assist the Beltsville programs. A second problem is that most of the members of the Board of Directors have served a considerable length of time and we find it difficult to identify people who are willing to replace them on the Board. We cannot expect our current Board members to serve forever. A part of the problem is that many retirees seem to increasingly move from the area and many choose to serve as Beltsville volunteers or collaborators and thus are not available to serve on the FAR-B Board. Thus, we are very interested in learning of anyone who would be interested in serving on the Board. We meet ten times a year for about two hours, thus the commitment of time is not great, but the rewards are significant.

Alan Stoner, President

Area Director's Message

In the last 4 months we witnessed significant changes and important events in the Area Office and across the entire NEA. Shortly after the February issue of FAR-B Newsletter left the printer, the Agency announced the appointment of Dr. Maureen Whalen as the new Deputy Administrator (DA) for Crop Production and Protection (CPP) in the Office of National Programs, effective February 21, 2016. Prior to that, Dr. Whalen served as an Associate Area Director of Northeast Area, the position she assumed last July. We are thankful to Dr. Whalen for her many contributions and unusual dedication to managing and advancing research programs in the Northeast Area and want to wish her many successes in her new position.

On February 23, we were welcoming Dr. Paul Sebesta to NEA for a 120-day-long detail as Acting Associate Area Director. Since joining our office, Dr. Sebesta has been executing the duties formerly performed by Dr. Whalen. He joined ARS in 2005 as the director of the USDA-ARS Kika de la Garza Subtropical Agricultural Research Center in Weslaco, TX. In 2008 he became the Director of the National Center for Agricultural Utilization Research in Peoria, IL, the position he currently holds. Dr. Sebesta earned his B.S., M.S., and Ph.D. degrees from Oklahoma State University. Before joining ARS, he was an Assistant Professor of Agronomy and winter wheat breeder at North Dakota State University, a project leader in the HybriTech Seed International, Inc., a Monsanto subsidiary, a unit head involved in intellectual property

management in the Texas A&M University, the Director of the University of California Desert Research and Extension Center (DREC) in El Centro California and a program Director with the National Audubon Society.

Dr. Vangimalla (VR) Reddy completed his detail as an Acting Associate Area Director on May 6. We are very thankful to him for his service, hard work and dedication, which significantly benefited NEA programs.

Dr. David Chitwood has agreed to serve in the position of Acting Associate Area Director vacated by Dr. Reddy. He assumed his responsibilities on May 8 and will continue in this capacity until July 30. After receiving a B.S. in mathematics and a Ph.D. in Plant Pathology from the University of Maryland, Dr. Chitwood joined ARS in 1982 as a Research Nematologist in the Insect Physiology Laboratory in BARC. He was transferred to the Nematology Laboratory in 1989 and appointed Research Leader three years later. His 100+ publications have focused on the biochemistry of plant-parasitic nematodes and their management with naturally occurring compounds from plants; his recent activities have also involved the detection of nematodes of quarantine importance that threaten U.S. agriculture. In addition to the duties described above, Dr. Chitwood has been simultaneously serving as the Acting Research Leader for the Systematic Mycology and Microbiology Lab at BARC for the last 16 months. Dr. Chitwood currently serves as the Northeast Area representative to the Research Leaders' Advisory Council. A past president of the Society of Nematologists and the International Federation of Nematology Societies, he currently serves on the editorial boards of three scientific journals. He is a fellow of the Society of Nematologists and is one of the two ARS scientists to have been awarded fellowship status in the European Society of Nematologists.

Since my last report, NEA employees have won significant awards and recognitions. Dr. Jim Giovannoni has been recently elected to the National Academy of Sciences (NAS). He is a Research Molecular Biologist and the Acting Director of the USDA-ARS Robert W. Holley Center for Agriculture and Health (RHCAH) in Ithaca, NY. Dr. Giovannoni has identified and characterized a number of genes and regulatory elements that influence fruit ripening, pigmentation, ethylene response and fruit nutritional quality. He demonstrated that changes in epigenome dy-

namics, are important in the unripe to ripe transition. Specifically, he showed that chemical demethylation is sufficient to induce ripening in very immature fruit – much earlier than can be achieved by ethylene or any other treatment.

It is noteworthy to add that four of the current five members of the NAS in ARS are working in NEA laboratories. These individuals are: Dr. Robert Davis in BARC, Jitender Dubey in BARC, Dr. Edward Buckler, RHCAH in Ithaca and Jim Giovannoni, RHCAH in Ithaca.

NEA employees, Ms. Martha Tomecek, Dr. Monica Santin-Duran, and other members of the Beltsville Task Force on Diversity as well as Dr. LinShu Liu from the Eastern Regional Research Center, Wyndmoor, PA won two Unsung Hero Awards for 2016 from the Organization of Professional Employees in the U.S. Department of Agriculture. These employees were recognized at a presentation of award ceremony in the USDA Jamie L. Whitten Building in Washington, DC. The ceremony was attended by the Honorable Tom Vilsack; Secretary of Agriculture, the Honorable Michael Scuse, Acting Deputy Secretary of Agriculture; Dr. Kathryn Woteki, the Undersecretary for REE, Dr. Ann Bartuska, Deputy Undersecretary for REE, Dr. Simon Liu, Associate Administrator ARS, and the other Department's officials.

The Twenty-Seventh Annual Beltsville Poster Day on April 26 was a great success. In addition to Beltsville-based scientists, the event marked the second year the competition also included scientists from the Foreign Plant Disease-Weed Science Research Unit in Frederick, MD. As in the past, high school students participated as well presenting posters from their school science projects. We are very grateful to the Friends of Agriculture Research in Beltsville (FAR-B) for their support of the event. Special thanks go to Dr. JoAnn Crouch, Poster Day Committee Chair and the other members of the Committee for their hard work and dedication that made this year's Poster Day a resounding success.

Dariusz M. Swietlik, Area Director, NEA

Financial Report

In the first half of 2016 FAR-B has an operating income of \$8,535. This included \$4,455 from dues and \$4,080 from donations made to the Combined Federal Campaign. Planned expenses for this calendar year will include support for four student interns at ARS

Beltsville laboratories (\$18,400), awards for winners of the Montgomery and Prince Georges Science Fairs (\$800), support for Henry A. Wallace Scientific Poster event held on April at the National Agricultural Library which includes prizes for the top three High School Posters (\$1,760), and support for various Beltsville laboratory program reviews (estimated at \$3,500). FAR-B projected budget deficit for 2016 is expected to be about \$15,000 when all expenditures have been made. We still have reserves held in Certificates of Deposit and in Mutual Funds of around \$100,000 which will continue support our program needs, when required. The FAR-B Board of Directors strongly believes that we can operate successfully by spending some of our reserves to better support agriculture research and outreach needs at Beltsville.

Richard Parry, Treasurer

CFC Update

FAR-B thanks the many federal employees who donated to FAR-B through the National Capital Area Combined Campaign in 2015. FAR-B received \$4080 this year. FAR-B has been approved to participate in the 2016 campaign. However, we have been alerted that FAR-B'S charity number may change.

Lew Smith, CFC

Poster Day at BARC

The 27th Annual Beltsville Poster Day was held April 27 at the National Agricultural Library. On display were 48 posters summarizing the research of Postdoctoral Research Associates, Visiting Scientists, and recently hired Research Scientists working at Beltsville and Ft. Detrick, MD. In addition, 17 posters prepared by high school students working as interns under the mentorship of Beltsville scientists were on display.

Following evaluation of the student posters by a committee of Beltsville scientists, FAR-B president Allan Stoner and Paul Sebesta, Acting Associate Director, Northeast Area presented the *Vernon G. Purcel Student Scientific Achievement Award* to Rachel Blume, for her 1st place research and poster, "The Effectiveness of Remote Sensing on the Prediction of Biomass of Wintertime Cover Crops."

Along with a certificate, Allan Stoner presented Rachel with a \$300 prize from FAR-B for her winning poster. Rachel was mentored by Dr. Dean Hively of

the Beltsville Hydrology and Remote Sensing Laboratory. By the time this newsletter is printed, Rachel will have graduated from Charles Herbert Flowers High School.

The second place winning poster was prepared by Asha Pawar, and titled "The Effect of Fungal Biocontrol, *Beauveria spp.* On Ectoparasite *Varroa destructor*." FAR-B presented Asha a \$200 prize for her research. Asha, a senior at Eleanor Roosevelt High School, was mentored by Dr. Jay Evans of the Beltsville Bee Research Laboratory. The third place winner was Nicholas Randolph, also a student at Eleanor Roosevelt High School. Nicholas's research was titled "Lignification in Cocoa Pods" and he was mentored by Mary Strem and Dr. Bryan Bailey of the Sustainable Perennial Crops Laboratory. His third place prize from FAR-B was \$100. A poster "Are Novel Microbes Invading Washington D.C. During the National Mall Turfgrass Renovation Project?" by Zakiya Carter, received Honorable Mention recognition.

In addition to recognizing the research of the high school students, following the awards ceremony, FAR-B provided a catered lunch for all participating scientists and guests.

Alan Stoner, President

Diversity Task Force Update

Hispanic Interns

Verneta Gaskins, director of the Beltsville Diversity Taskforce has announced that thirty-eight (38) Latino-American interns are expected this summer, all are matched with mentors. They come from seven institutions of graduate education. Most will start on June 6, the remaining half-dozen on June 20.

"We have 38 students from 10 different universities throughout Texas, Puerto Rico, New Mexico, California and Florida that will be participating. BARC will host the bulk of the interns (34 students) and BHNRC will host 4. We have more than 20 scientists from 12 different labs set to mentor the students participating in the learning experience," she says.

Women's History Project

At the National Agricultural Library in March, presenter/ curator, Emily Marsh discussed a project that she had developed--a national online exhibit related to the Bureau of Home Economics. The Bureau of

Home Economics was a pioneering unit in the USDA for several reasons. It was the first major unit to have been headed by a woman: Louise Stanley, Ph.D. It focused on topics of central concern to women, as defined by the cultural norms of the early twentieth century: sewing, kitchen design and features, time spent on housework, children's clothing, and food preparation and preservation. Lastly, it took a then novel approach to its work: it strove to first understand what its primary audience needed within its broad mandate and then shaped its specific programs around those needs. The exhibit can be seen at <http://www.nal.usda.gov/exhibits/ipd/apronsandkitchens/>

**Verneta Gaskins, Diversity Task Force
Plant Pathologist, USDA-ARS**

Growing A Pizza

Ask a group of kids where pizza comes from, and you will hear Dominos, Papa Johns, Little Caesars, Pizza Hut, Three Brothers, Ledo Pizza, and of course the supermarket.

Enter the pizza-perfect educational opportunity to grow pizza-ingredient plants within the NEA Beltsville Diversity Taskforce's Student Discovery Garden.

Although the pizza garden only takes up half of the "nutrition" plot (amidst the other 6 plots), it will



From left to right: Karen Williams, National Germplasm Resources Lab; Matt Greenstone, Invasive Insect Biocontrol & Behavior Lab; Ed Clark, Invasive Insect Biocontrol & Behavior Lab; Maria Hult, Nematology Lab; Sue Mischke, Sustainable Perennial Crops Lab; Mary Ann Guaragna, retired from the National Arboretum; Lew Ziska, Crop Systems and Global Change Lab and SDG Founder; Ann Simpkins, Sustainable Perennial Crops Lab, and SDG Manager and Coordinator.

be utilized as yet another education resource for visiting school groups.

A companion "Growing a Pizza" picture book was created describing how the ingredients become a pizza, from planting wheat and tomato seeds to growing, harvesting, and processing those ingredients into the corresponding crust and sauce. Even feed for the cow and cheese making process is shown. Plus the extra spices and toppings to make the perfect pizza are also pictured. The book makes an excellent teaching tool using the garden itself as the real-life backdrop.

The so-called "pizza garden" will also be used as a segue to talk about the other 6 plots – Container; Bioenergy; Pollinator; Native Food Crops of the Americas; African American Heritage; and the new Sustainable plot; plus the other teaching stations, including the herbs and spices area; weather station; mushroom logs; and aquaponics system -- think fish topping...anchovies, anyone?

As in past years, the Student Discovery Garden managers – Ann Simpkins and Martha Tomecek – donate the harvested produce to the Saint Camillus Church Pantry in Silver Spring, MD. Who knows, maybe this year they'll donate an actual pizza!

Jay H. Green, MS, RDN
Engagement, Outreach & Visitor Programs

ta where he earned a M.S. degree in 1957 and a Ph.D. degree in 1961 in plant pathology.

Dr. Goth is a well-known plant pathologist who creatively developed methods to identify, isolate, and detect a variety of bacterial, fungal, and viral pathogens of horticultural crops in a research effort to develop and evaluate host resistance to a number of these plant pathogens. Among his many research achievements, the following have had the most impact: discovery and identification of sources of resistance to the devastating watermelon blotch bacterium; identification of bacterium causing pepper fruit rot; discovery of new fungal pathogens of beans; co-discovery of the presence of A2 strain of *Phytophthora infestans*, the cause of potato late blight; development of late blight resistant potato germplasm that has survived the challenging new strains of *P. infestans*; development of a detached leaf method to assay foliar pathogens of tomato and potato; demonstration of *Fusarium proliferatum* as the source of the mycotoxin fumonisin in rye; and demonstration that UV-B irradiation inhibits Carla virus infection and that the Carla virus PVS is not transmitted via true potato seed.

Dr. Goth has coauthored over 159 publications and participated in the release of several potato varieties. As the administrator for 78 specific cooperative agreements and grants with 14 universities within the last 8 years of his career, he administered over \$2 million to university researchers on Verticillium wilt, bacterial wilt, bacterial ring rot, early blight, silver scurf and scab. He has been active in the American Phytopathology Society (APS), Potomac Division of APS, and the Potato Association of America (PAA). As a member of Potomac Division of APS since 1962, he served as its program chair, secretary-treasurer, vice-president, and president. As a member of the PAA since 1967, he served as director, secretary-treasurer, vice-chairperson, and chairperson of its pathology section. He was selected as an Honorary Life Member of PAA in 1993 for his outstanding research efforts in the development of disease-resistant potatoes. He received the North American Seed Potato Researcher of the Year Award in 1993 from the National Potato Council for research in evaluating and improving disease resistance in potato varieties. In March 1998, he was the recipient of the Distinguished Service Award from the Potomac Division APS for contributions to the science of plant pathology. In August 1998, Dr. Goth was awarded the

IN MEMORIAM

Robert W. Goth

Dr. Robert W. Goth, retired Research Plant Pathologist, USDA, ARS passed away on Friday, March 11, 2016. Bob started his career with ARS in 1961 as a Research Plant Pathologist in the Bean and Pea Investigations Unit at BARC. In 1968, he transferred to the Potato Investigations unit in Beltsville and subsequently to the former Vegetable Laboratory. Bob retired on December 31, 1999, after 44 years of government service including four and a half years of military credit. Bob grew up on a dairy farm in Phillips, WI. He served in the U.S. Army during WWII and the Korean conflict and utilized the 'GI Bill' to graduate from the University of Wisconsin at Superior in 1954 with a B.S. degree in biology. He entered graduate school at the University of Minneso-

Northeastern States Agricultural Experiment Station Directors Award for Regional Research Excellence for outstanding cooperation among federal and state programs in evaluating and developing new cultivars to sustain economic potato production in the Northeast Region. He was also a member of Gamma Sigma Delta, Gamma Alpha, and Sigma Xi.

Jack Lewis

Jack Allen Lewis passed away on May 4, 2015, after a long struggle with multiple sclerosis (MS). In spite of his difficulties with MS late in his career, Lewis was an accomplished soil scientist with USDA ARS in Beltsville, MD. He was a member of the Soil Borne Diseases Laboratory (SBDL) and its successor, the Biocontrol of Plant Diseases Laboratory (BPDL), until he retired in 1999 after 34 years of service. He joined the USDA laboratory, headed by George C. Papavizas, in 1965. Jack's professional career in soil microbiology started at Rutgers University, New Brunswick, NJ, where he earned a Ph.D. degree under his major advisor, Robert L. Starkey, in the Department of Agricultural Microbiology. He also earned a B.S. degree from Brooklyn College in 1960 and an M.S. degree from the University of Connecticut in 1962.

Lewis worked as a team leader and team member, responsible for basic and applied research with emphasis on the ecology of biological control agents, including fungi, bacteria, and actinomycetes and their interrelationships with soilborne plant pathogens in integrated pest management systems. The objectives of his research also included the development of delivery systems for introduction into agricultural ecosystems or as seed treatments with formulated biocontrol agents.

Lewis' research achievements are documented in more than 125 peer-reviewed original research and review articles and numerous abstracts. During his 34 years of service with ARS, he was a leader or participant in team research to investigate biological, chemical, and integrated approaches for control of soilborne diseases of economic crops. He performed extensive research on the biology and ecology of numerous pathogens. His contributions with the biocontrol fungi, *Trichoderma* and *Gliocladium*, and especially the potential for their use in innovative formulation technology, represent outstanding accomplishments in this specialized area of research. He was a team member

in the development of *GlioGard* and *SoilGard* by private industry. As a member of this team, he received an ARS Technology Transfer Award for the research on this work in cooperation with a private firm in 1991, a certificate of merit for superior performance in conducting and reporting research on delivery systems of biocontrol agents and on novel biocontrol agents in 1991, and a Federal Laboratory Consortium Award on delivery system development in 1992. He was awarded three U.S. Patent Office awards for formulation inventions in 1987, 1990, and 1991. This work led to a first in the field for the registration by the U.S. EPA for a commercial formulation to control soilborne plant pathogens.

Lewis was a member of APS serving on the Biological Control Committee. As a member of the APS Potomac Division, he served on the Program, Auditing, and Awards Committees. He was also a member of the International Organization for Biological Control of Noxious Animals and Plants and the Society for Controlled Release of Bioactive Materials. He worked with the North Central Regional Project on Biological Control of Soilborne Plant Pathogens in Integrated Crop Management as secretary, vice chair, and chair, the Eastern Research Conference on the Ecology of Root- Infecting Microorganisms, and the International Workshop on *Trichoderma* and *Gliocladium*. Lewis worked cooperatively with scientists in Pakistan, Japan, Mexico, and Israel. These projects were sponsored by USAID PL-480 in Pakistan, U.S.-Israel BSF and BARD, and O.I.C.D. in Mexico. He served as a regional editor for the journal *Soil Biology and Biochemistry*.

Jack Meiners

FARB member Jack P. Meiners, 96, a plant pathologist retired from the U.S. Department of Agriculture's Research Center at Beltsville, MD died April 24, 2016, after a brief illness. He had lived in Silver Spring, MD since 1958.

Dr. Meiners, who joined the USDA's ARS in 1946, came to the Beltsville Research Center in 1958 to help manage research for the national program of breeding and diseases of cereal crops. Beginning in 1965 he assumed a similar position for the ARS national program of research on all crop plants. In 1970 he was appointed leader of ARS national program of research on the breeding and diseases of beans, peas and other edible legumes. With the reorganization of

ARS in 1972, he was appointed Chairman of the Plant Protection Institute at the Center, administering research on plant insect pests and diseases. He left this position in 1974 to engage in research on bean diseases, which he continued until his retirement in 1980.

Prior to coming to Beltsville, Dr. Meiners researched grass and wheat diseases at a USDA research facility in Pullman, WA, for which he was given a Superior Service Award by the USDA.

Dr. Meiners was born and raised in Walla Walla, WA. He received a bachelor's degree in agronomy and a doctorate in plant pathology from Washington State University and, before joining USDA, he was a Professor of Plant Pathology at the university. Following retirement in 1980, Dr. Meiners consulted on agricultural research in various locations in Africa, Asia, and South America. During his career, he authored some 75 scientific papers.

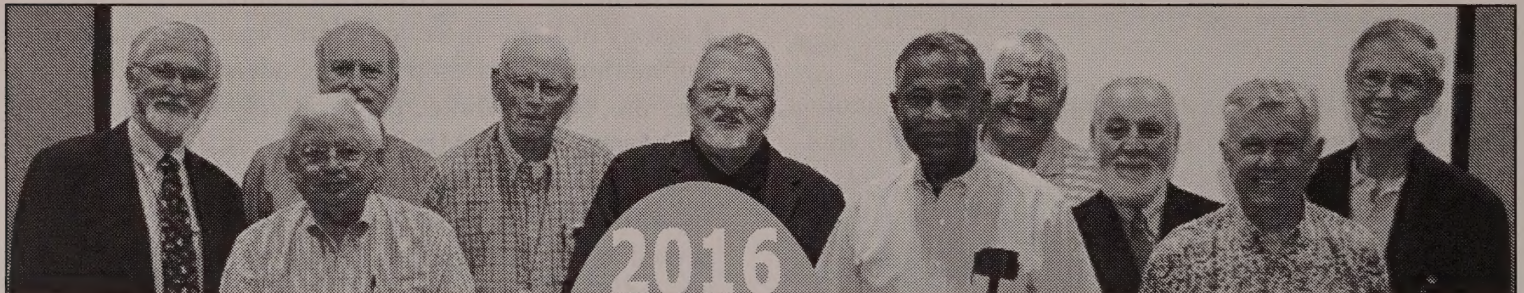
Robert Gilbert Yeck

Robert Gilbert Yeck was born on December 6, 1920 in LaValle, WI. Dr. Yeck grew up mainly on a farm

tending on animals, crops, and keeping farm equipment operational. One of his early jobs was a machinist. Dr. Yeck served in the U.S. Army Air Corps in the Pacific during World War II. He remained a reservist in The U.S. Air Force retiring with the rank of Lieutenant Colonel. Dr. Yeck graduated from Reedsburg Wisconsin High School and received a B.S. Agriculture degree from the University of Wisconsin

He began his career with the USDA in 1948 while in Wisconsin. He was later a research director for the USDA at the University of Missouri. While at Missouri he completed his education by being awarded a M.S. in Agricultural Engineering degree and a Ph.D. In 1960 Dr. Yeck was transferred to Beltsville, MD and in 1971 was Chief of the ARS Livestock Engineering and Farm Structures Research Branch.

He retired in 1980 from the USDA as a senior staff scientist. During the next eight years Dr. Yeck, was a visiting professor in the Agricultural Engineering Department at the University of Maryland. He taught courses and supervised the farm plan exchanged program before retiring in 1988.



Left to right: Jim Anderson, Richard Parry, Dave Chitwood, Dick Zimmerman, David Kuykendall, Essex Finney, Allan Stoner, Hank Becker, Jim Butcher and Lew Smith (absent at time of photo: K. Darwin Murrell.)

F A R - B B O A R D O F D I R E C T O R S

President: **Allan Stoner** stonerfam@earthlink.net
Past President: **James Anderson** janderson1940@gmail.com
Director: **K. Darwin Murrell** kdmurrell@comcast.net

TO CONTACT THE FAR-B BOARD

Call: 301-504-6078 • or visit: <http://www.far-b.org>
Email: farbboardod@yahoo.com

Friends of Agricultural Research-Beltsville, Inc.
P.O. Box 1061 • Beltsville, MD 20704-1061

Treasurer: **Richard Parry** rmparry@verizon.net
Director: **Essex Finney** eeffinney2@msn.com
CFC: **Lew Smith** lws406@comcast.net
BARC Outreach: **Jim Butcher** jim.hickory@verizon.net
BARC Liaison: **David Chitwood** david.chitwood@ars.usda.gov
Publicity: **Hank Becker** hankbecker3@verizon.net
Webmaster: **Tasha Sprague** SpragueT@gmail.com
Board Members: **Withers Horner** wizlizlob@embarqmail.com
David Kuykendall davekuykendall6@gmail.com
Richard Zimmerman rhz1415@verizon.net



THE FAR-B NEWS

Dedicated to promoting the research and education programs of the BELTSVILLE AREA, Beltsville, MD

Friends of Agricultural Research-Beltsville, Incorporated P.O. Box 1061, Beltsville, MD 20704-1061

JANUARY 2017

Editor: Hank Becker

President's Message

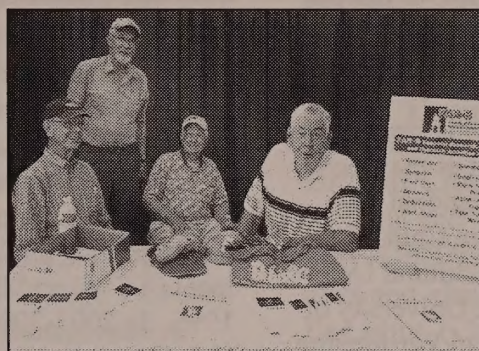
Does FAR-B make a difference? I often ask myself this question and I always conclude the answer is a resounding Yes!

For example, FAR-B continues to provide annual written testimony on behalf of the Beltsville Center and its research programs to the congressional sub-committees responsible for agricultural appropriations. Although it's impossible to measure the impact of our testimony, in 2016 FAR-B received a letter from an aide of Senator Barbara Mikulski thanking us our submittal and soon thereafter we received an announcement from the Senator stating that the Consolidated Appropriations Act of 2016 included \$37.1 million to modernize research laboratories at Beltsville, something FAR-B has long supported.

Also, in September of 2016, FAR-B provided breakfast and participated in a MD Ag Business Roundtable at Beltsville that involved a number of state and local leaders. During the program, it was gratifying to hear the local state senator acknowledge FAR-B's role in supporting the Beltsville Center.

During the past six months, FAR-B handled funds and provided refreshments for several events. These included lunch for those attending the annual Poster Day and financial support for numerous activities sponsored by the Diversity Taskforce at Beltsville. The latter included special emphasis programs recognizing African American History Month, Women's History Month, Asian American Pacific Islander Heritage Month, and Veteran's Appreciation Day, as well as support for the Student Discovery Garden that was visited by more than 800 students from area schools.

FAR-B also provided funds in 2016 to support four summer interns from local high schools to work in Beltsville Laboratories. Examples of feedback received from student's mentors included:



FAR-B Board Members at the BARC Public Field Day in September, 2016.

"Philip was an outstanding intern that far exceeded my expectation for a high school student."

"During his internship, Mr. Miljanic developed research and laboratory skills he will use in college and throughout his career."

"Without this summer student's assistance, the research project he worked on would have taken my technician and me a much longer time to accomplish our goal."

In addition, FAR-B provided cash prizes to three students working in Beltsville labs whose posters describing their research were judged to be outstanding when displayed at Poster Day.

In addition to direct support for Beltsville programs, FAR-B's community outreach helps educate area students about agriculture and science. We continue to sponsor an annual visit of the MD Agricultural Education Foundation's mobile science laboratory to the local Beltsville Academy where more than 750 children from K thru 5 are exposed to a 45 minute "hands on" program. In this case, one only has to experience the children's enthusiasm and see the expressions on their faces when they visit the laboratory to see that the program made a difference. Then when we see the posters the children prepare after they return to the classroom, there is no question that they grasped the messages they received about science and agriculture. FAR-B also provides cash prizes to middle school students participating in Prince George's and Montgomery County Middle School Science Fairs.

Thus, despite our limited financial resources and the modest human capital provided by our Board of Directors and occasional volunteers, these examples lead me to conclude that FAR-B is indeed making important contributions to the Beltsville research programs and to the local community.

Alan Stoner, President

Area Director's Message

Since my last report in June 2016, the Beltsville agriculture scientific community witnessed a lot of activities. On January 8, 2017 Dr. Howard Zhang assumed the position of Director of BARC. His appointment followed the reassignment of Dr. Ellen Harris, the former BARC Director, to the position of Associate Director of the Southeast Area in Stoneville, MS.

Dr. Howard Zhang comes to Beltsville from Albany, CA where for many years he served as the Center Director of the USDA ARS Western Regional Research Center (WRRRC). Originally from China, he received a BS degree from Hunan Agricultural University in 1982, an MS degree from the University of Guelph in 1987, and a Ph.D. degree from Washington State University (WSU) in 1992. After serving two years as a post-doctoral associate at WSU, he became an Assistant Professor at the Ohio State University and in the ensuing years was promoted through the academic ranks to Full Professor. In 2004, he joined ARS as the Research Leader of Food Safety Intervention Technologies Research Unit at the Eastern Regional Research Center in Wyndmoor, PA where he led research on the development of food safety intervention technologies for produce, juices, beverages, meat and ready-to-eat foods. He became the Director of WRRRC in 2009. During his tenure in ARS, he served on important leadership details such as Acting Associate Area Director in North Atlantic Area and South Atlantic Area. Dr. Zhang's scientific expertise include non-thermal food processing technologies, pulsed electric fields (PEF), packaging, electronic instrumentation and process automation. He is a pioneer and inventor of PEF technology and Ultrasonic Sealing. He authored six US patents, 105 peer-reviewed journal publications, two books and 20 book chapters. His scientific accomplishments earned him the Institute of Food Technologists' 2001 Samuel Cate Prescott Award and Research and Development Associates' 2009 Colonel Rohland Isker Award. He served as a Chair of the Non-thermal Processing Division of Institute of Food Technology and is a fellow of the Institute.

We are very grateful to Dr. Le Ann Bloomberg who ably served as the Acting BARC Director during the transitional period between the end of Dr. Harris's

and the beginning of Dr. Zhang's tenures as BARC directors.

Dr. Glenn E. Moglen was appointed as the Research Leader for the Hydrology and Remote Sensing Laboratory (HRSL) in BARC. He came to us from Virginia Tech University where he served as a full professor in the Charles E. Via, Jr., Department of Civil and Environmental Engineering and the Director of the Occoquan Laboratory.

He earned his BSCE at the University of Maryland, his MSCE at Colorado State University, and Ph.D. from the Massachusetts Institute of Technology. Dr. Moglen spent one year at the National Weather Service, Office of Hydrology in Silver Spring, MD before joining the University of Maryland, Department of Civil and Environmental Engineering in 1996. In 2003-2004, he was on a sabbatical at the U.S. Geological Survey, Office of Surface Water in Reston, VA, publishing a new technique for urban flood estimation as a USGS Scientific Investigations Report. Dr. Moglen is a Professional Engineer and a Fellow of both the American Society of Civil Engineers (ASCE) and the Environmental and Water Resources Institute (EWRI). He has authored more than 40 journal articles, several book chapters, and served as editor of two ASCE proceedings. He is currently the Vice President of EWRI, and will become President in October 2018. Dr. Moglen's research focuses on themes of stormwater, flooding, land use and climate change effects, water supply, and urban hydrology. His first textbook, *Fundamentals of Open Channel Flow*, was published in 2015 by the CRC Press.

We are very grateful to Dr. Michael Cosh for his able service as the Acting Research Leader of HRSL for more than 2 years.

A groundbreaking ceremony was held on October 28, 2016 for a U.S.-Chinese Garden at the U.S. National Arboretum (USNA) in Washington, D.C. This is a joint project between the United States and the People's Republic of China but all the funds needed for constructing the Garden have been provided by the Chinese side. The Garden will cover 12 acres and will be located within the USNA's 446 acres. The resources for the on-going operation of the Garden will be generated through the effort of the National China Garden Foundation, a 501(c)(3) nonprofit organization.

On December 22, 2016 we had another groundbreaking ceremony for restoration of 25-plus acres

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of spray irrigation fields on the BARC's North Farm to a wetland ecosystem. As part of the USDA, BARC is committed to EPA's short- and long-term nutrient and sediment reduction goals to restore the Chesapeake Bay. However, funding for restoration activities is not available to federal agencies in the watershed. Thus, our progress in meeting the EPA's goals are achieved by the sheer will power and tenacity of ARS employees to find the resources necessary to get the job done. This project is the first of its kind public/private partnership project for the ARS in the Chesapeake Bay watershed. It required extensive coordination between numerous state and federal agencies including: USDA ARS, U.S. Army Corps of Engineers, Maryland Department of Environment, Prince George's County Department of Public Works & Transportation. GreenVest led a team of private partners including GreenTrust Alliance, Princeton Hydro, Environmental Quality Resources. All funding has been provided through non-federal sources, including but not limited to a grant from the Maryland Department of Environment-Chesapeake Bay Trust (MDE-CBT); Non-tidal Wetland Grant Program, and payment from Prince George's County Department of Public Works & Transportation. This project will prevent 36,000 pounds of nutrients over its life cycle from entering the watershed and will protect 22 acres of irreplaceable BARC research and production farmland forever.

Recently, BARC scientists have been recognized on numerous occasions for their scientific excellence. Dr. Curt Van Tassell was inducted as a Fellow of the American Dairy Science Association; Dr. Jitender Dubey was inducted as American College of Pathology Fellow; Dr. Kathleen Haynes received the Excellence in Technology Transfer Award for the new potato cultivar 'Elkton' from 2016 Federal Laboratory Consortium for Technology Transfer Mid-Atlantic Region; Dr. Jo Anne Crouch was bestowed by ARS the Herbert L. Rothbart Outstanding Early Career Research Scientist Award; and Dr. Kamal Chauhan was recognized with 2016 Northeast Area Senior Research Scientist Award. A number of our scientists also received significant research grants from various agencies or monetary support for research from their partners

through different type of agreements. Examples include: Dr. Yaguang Luo who received NIFA grant of \$3.7 M for post-harvest produce processing; Dr. Moon Kim-RDA-OIRP grant of \$750,000 for food safety sensing technology; Dr. Hyun Lillehoj-NIFA grant of \$500,000 for poultry immune reagent development; Dr. James Polashock-AFRI award of \$456,727 for *Integrating Phytochemistry Phenotyping and Genomics in the Development of Novel Cranberry Fruit Quality Traits*; Dr. Qijian Song-United Soybean grant of \$375,000 for soybean genomics; Dr. Jay Evans and Dr. Judy Chen-APHIS grants of \$160,000 for Nosema and Varroa mites in bees; Dr. Lisa Castlebury-USDA APHIS funding for \$150,000 Systematics and identification of Urocystis species causing flag smut. (Co PI with Dr. Lori M. Carris); Dr. Jitender Dubey-CRADA of \$100K for Toxoplasma vaccine development; Dr. Jay Evans-NIFA translational grant for \$100K treatment for Varroa mites (in bees) (with ARS Kansas). Unfortunately, the space constraints prevent me from citing all the recognitions and awards received by our scientists. Irrespective whether mentioned or non-mentioned, we owe all our scientists and support personnel in Beltsville a word of gratitude for their excellence, commitment, productivity and dedication that they continuously demonstrate.

Dariusz M. Swietlik, Area Director, NEA

Financial Report

During the calendar year of 2016, FAR-B received \$6,290 in dues payments and received \$4,080 from the Combined Federal Campaign (CFC). FAR-B also received interest income from bank Certificates of Deposits (CD) and dividends/capital gains of \$1,097 from mutual funds. Total income was \$11,467. Expenses for 2016 exceeded total income as planned by the Board of Directors. The biggest expense was sponsoring four student summer interns (\$18,400). Other expenses include sponsoring the annual poster day at the NAL (\$1,635), funding the Diversity Taskforce programs (\$1,725), providing prizes for winners of county science fairs (\$400), providing partial support for Maryland Agricultural Education Foundation science trailer at the Beltsville Academy (\$600), supporting program-planning meet-

ings at Beltsville (\$3,421). Administrative expenses for printing and mailing the newsletter, post office box rental, and assistance preparing the tax return were \$1,456. Total expenditures were \$27,637, which resulted in a deficit of \$16,170 for the year.

FAR-B currently has \$73,592.33 in three CDs, one will mature in March, 2017 and another matures in November 2017. We also hold shares in two mutual funds, whose market value totals \$31,764.7. The budget plan for 2017 approved by the Board will also have a deficit, but sufficient funds are held in reserves that will cover the difference.

Richard Parry, Treasurer



BARC Public Field Day

BARC Public Field Day was held on September 10, 2016 from 10am-2pm. The Field Day provided an opportunity for ARS scientists in Beltsville to display their research and highlight its vital role to agriculture and the public. After several months of preparations, the BARC community again showcased the wide world of science. More than 17 labs exhibited. Exhibitors included: FARB, the Lions Club, the Safety, Occupational Health and Environmental Staff (SOHES), and the National Agriculture Library (NAL). There was food for everyone and face painting for the kids and the young at heart.

The BARC Public Field Day was a success! Even with the excessive heat, we had an amazing turn out by the public.

Taunya D. Said, Management Analyst, BARC

FARB Sponsors Four Student Summer Interns

In 2016, FARB's biggest expense was \$18,400 to sponsor four student summer interns. They are as follows.

At the US. National Arboretum, student Philip Miljanic was mentored for two and a half months by

Scott Warnke of the Floral and Nursery Plants Research Unit. Philip worked in the lab on a project to develop high, through put cost effective strategies for the detection of interspecific grass hybrids. Geneticist Warnke reported that "Philip got exposed to science and hopefully that will help him in his decision making process about future career choices."

At the Food Quality Laboratory, Tianbao Yang mentored Annmarie Proctor for over 2 months. She worked on strawberry fruits. She learned experimental techniques including pH meter calibration and application, TA analysis, medium preparation, the theory of plant micropropagation, functions of plant hormones and applications, computational data formatting and analysis, as well as basic statistic principle. He also obtained hands-on experiences on greenhouse plants including branch trimming, flower pollinating, fruit harvesting.

At the Diet Genomics and Immunology Laboratory, Beltsville Human Nutrition Research Center, Gloria Solano-Aguilar mentored Mariana Escalante. Mariana was responsible for processing biological samples derived from animal experiments that aimed to evaluate the impact of dietary interventions on the gene expression response in intestinal tissue. To accomplish the goal, Mariana was trained to follow laboratory safe practices and specific molecular-based protocols for the handling of samples. She contributed to the research of laboratory by helping with the processing of biological samples to be used for gene expression analysis. She was able to independently generate high quality RNA samples derived from animal tissues with good reproducibility. Her mentor reports "Mariana was taught how to tabulate and analyze data. The laboratory skills she acquired from this summer internship will directly benefit her since she has decided to follow a career on science--biological engineering at VA Tech University."

At the Crop Systems Global Change Laboratory, Eton Codling is mentoring Jeffery Onyeador. Jeffery was to continue an ongoing experiment to determine the effects of broiler litter ash—a product from the combustion of broiler litter for electricity production—on nitrogen fixation by legumes when applied to low fertility soils. He was to conduct a greenhouse experiment in which corn would be used as a test crop to determine the residual nitrogen in soils amended with broiler litter ash and cropped with soybeans. He

reported for work on December 16 during his winter break and will continue working next summer.

Codling said, "I had the privilege of mentoring with Mr. Onyeador from September 2015 through April 2016 on his high school science project entitled *Uptake of Lead and Arsenic by Sweet Potato Leaves from Urban and Orchard Soils Contaminated with Lead and/or Arsenic*. The findings from his research is submitted to a peer reviewed journal. These findings will be valuable to master and urban gardeners who consume sweet potato leaves as a leafy vegetable. During his internship he developed research and laboratory skills he will use in college at the University of Pittsburg and throughout his career."

In a letter to Allan Stoner, Area Director Dariusz Swietlik, writes, "As promised I am forwarding to you reports on activities, accomplishments and impact of the interns who were funded by FAR-B last summer. This is a very successful program and our research programs are benefiting greatly from the involvement of these young people in our scientific investigations. Also, these interns get exposed to real scientific investigations. We hope that their experiences will inspire them to choose science and agriculture research as their life-long careers.

On behalf of NEA, I would like to express my thanks and gratitude to FAR-B for providing funds to support four interns every summer. Not only do these grants enhance our research program but hopefully also train future scientists who at some point will replace us in the pursuit of mission to feed the world."

Hank Becker, Editor

MD Agricultural Business Roundtable

BARC held the first MD Agricultural Business Roundtable on September 9, 2016 to establish a partnership with local stakeholders to raise awareness of the potential for public/private opportunities between BARC and local businesses. FAR-B sponsored a full course breakfast.

One panel included presentations from Allan Stoner, FAR-B Chair, about how they support BARC. James Coleman, President & CEO, Prince George's County Economic Development Corp. (EDC) talked about how they can link businesses to BARC; and James Poulos, NEA Tech Transfer Coordinator dis-

cussed how ARS mechanisms can facilitate public/private partnerships.

The second panel included presentations by scientists from six labs about how their research was an example of public/private partnerships. They included Michel Cavigelli, Sustainable Agricultural Systems Laboratory; Michael Cosh, Hydrology and Remote Sensing Laboratory; Matt Buffington, Systematic Entomology Laboratory; Don Weber, Invasive Insect Biocontrol and Behavior Laboratory; Patricia Millner, Environmental Microbial and Food Safety Laboratory; Kim Lewers, Genetic Improvement for Fruits and Vegetables Laboratory.

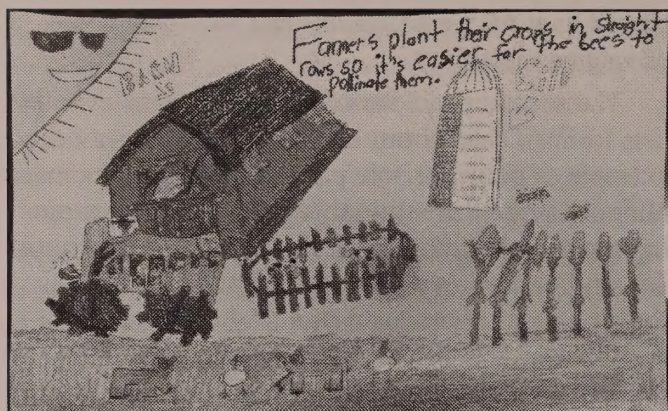
Each panel ended with a question and answer period. Attendees included BARC scientists, three National Program Leaders, public officials from the City of Greenbelt, FAR-B representatives, a MD State Senator, two representatives from the MD Commerce Department, and a representative from the Prince George's County Executive Office who also was the County's Department of the Environment Director, and several EDC staff members. The networking between the participants and the scientists was a perfect match. We look forward to future partnerships that may be launched from our first Roundtable.

Taunya D. Said, Management Analyst, BARC



Mobile Science Lab Returns to Beltsville School

Through the joint sponsorship of FAR-B, the Parent Teachers Association, and school-funding sources the Mobile Science Laboratory returned to the Beltsville Academy again this year. Scientists from BARC helped local elementary school students learn about insects and how they can help or harm agriculture. Laura Gu, Allan Stoner (retired), and Dan Veltri helped out at the Mobile Science Laboratory, a class-



Poster by Jason Jiminez, 3rd grader at the Beltsville Academy. He is in Mrs. Pinchitti's class.

room-on-wheels that travels to schools, stays for a week, and provides hands-on lessons on agricultural topics.

Kindergarteners and Grades 1 and 2 students were fascinated as a professional Mobile Science Lab teacher led them through a look-see and naming of insect parts such as compound eyes, wings, legs, head, thorax, abdomen, and specialized chewing, siphoning, or piercing and sucking mouthparts. Grade 3, 4, and 5 students worked through a vigorous exercise demonstrating on paper how farming practices and farm design layouts can protect our environment. Several Beltsville research scientists gave of their valuable time to support these educational efforts.

Mobile Science Labs educational programs are made available from the Maryland Agricultural Education Foundation.

Jim Butcher, BARC Outreach

Diversity Taskforce Update

The Beltsville NEA Diversity Taskforce Report extends a sincere "Thank you" to FARB for its support of our recent endeavors. Since 2008, our group has had the mission to provide support and leadership to the Beltsville Area Administration to ensure that the research mission of ARS is performed at the highest scientific level possible. We firmly believe that the creation and maintenance of a workforce that represents the nations and surrounding community's increasingly diverse population will ultimately aid in the achievement of that goal.

The Diversity Taskforce received USDA's Unsung Hero Award from the Organization of Professional Employees. This was accomplished in no

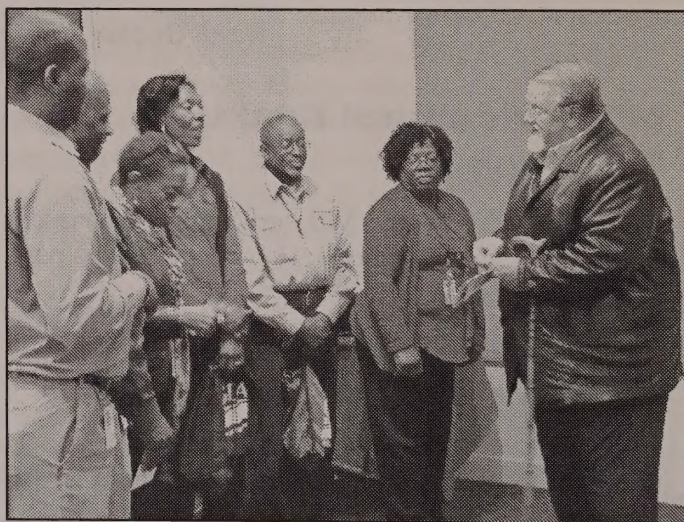
small part because of the financial support of FAR-B and its membership. We have recently had great success in the implementations of such outreach programs as:

- Cultural Heritage Month celebrations
- A flourishing Student Discovery Garden that averages 500 visitors a year, and donates half a ton of produce to a local food pantry each year
- Continuation of summer internships for students from Hispanic Serving Institutions who are supported by grants given to their university from NIFA. Thirty-eight students had internships during summer 2016. Students come here from Universities in Puerto Rico, Texas, Florida, California and New Mexico.

Discussions and meetings have begun with the NEA administrators and the Beltsville Center Director to decide a course for the future as we plan for coming year.

FARB members have helped make all of these endeavors successful with their constant support. We anticipate that our efforts will inspire a diverse community of future scientists to see the wealth of possibilities in agricultural sciences and FARB will be an integral part of that achievement. We applaud your dedication to promoting the importance of agricultural science through outreach. We look forward to future collaborations.

*Jay H. Green, MS, RDN
Engagement, Outreach & Visitor Programs*



BARC Veterans were awarded Mission BBQ complimentary sandwich tickets by FARB Secretary David Kuykendall at the Diversity Taskforce's November Veterans' Recognition Program organized by Verneta Gaskins.

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U.S. National Arboretum Celebrates 40th Anniversary of Its Bonsai Museum

2016 marks the 40th anniversary of the U.S. National Arboretum's National Bonsai & Penjing Museum in the nation's capital. The museum began in 1976 when Japan donated 53 bonsai and six viewing stones to the people of the United States to commemorate the U.S. Bicentennial.

The terms "bonsai" and "penjing"—Japanese and Chinese, respectively, for "pot-cultivated"—refer to the art of designing and maintaining miniature living trees or shrubs, long considered the ultimate in gardening skill.

Japanese bonsai and its precursor, Chinese penjing, are steeped in ancient Asian traditions. Branch placement, styling, and even the choice of the pot—all these elements work in harmony to convey deep symbolism and reverence for nature.

The National Bonsai and Penjing Museum has one of the largest bonsai collections in North America. According to museum curator Jack Sustic, the collection has continued to grow steadily over the past four decades with the addition of pieces from around the world. Today, three pavilions house about 150 plants.

The Exhibits Gallery is a focal point that celebrates the related art forms of "viewing stones" (stone appreciation) and "ikebana" (Japanese flower arranging).

The Special Exhibits Wing features the work of local bonsai enthusiasts and pieces from the permanent collection with special seasonal features.

A historically significant point in U.S.-Japanese relations is commemorated by a special bonsai in the collection: a 390-year-old specimen from Japan that survived the atomic bombing of Hiroshima. The tree, donated by bonsai master Masaru Yamaki, was part of the 53-specimen gift to the United States for its Bicentennial.

The collection also features the most famous bonsai in the world, Goshin, created by Japanese-American bonsai master John Naka. Japanese for "protector of the spirit," Goshin is a forest planting of 11 junipers representing Naka's 11 grandchildren at the time the bonsai was created.

Sharon Durham, ARS Information Staff

FELLOWSHIP WINNER THANKS FAR-B

In 2000, the FAR-B Board awarded Dr. Ali M. Sadeghi, a senior scientist with Hydrology & Remote Sensing Laboratory, the FAR-B George W. Irving Fellowship Award (\$10,000).

At that time, a watershed water quality model was needed to provide simultaneous information on nutrients, sediment, and pathogens. The existing USDA-ARS Soil & Water Assessment Tool (or SWAT), developed by Dr. Jeff Arnold and his colleagues at ARS, Temple, TX, was capable of providing reasonable estimates for excess nutrients and sediment at that time, but did not have a pathogen component.

To improve the model, Dr. Sadeghi then established contact with Dr. Jeff Arnold and managed to organize a team of scientists from Beltsville and Temple for the inclusion of a pathogen component into the SWAT model. He then used his award for his expenses of a 3-month sabbatical time in 2002 at an ARS location in Temple, TX, during which he worked closely with Dr. Arnold to expand model application to include pathogen assessment. This was the first time that pathogen formulations were incorporated into the SWAT model. This model was then being recommended by USEPA for use in the States Total Maximum Daily Load (TMDL) watershed water quality assessment.

Dr. Sadeghi says he appreciates this generous award very much that has helped both his scientific career and the scientific community tremendously.

IN MEMORIAM

Dorothy Lee Trollinger Fones

On Tuesday, October 11, 2016, Dorothy Fones died at her residence in Vienna, VA, after a battle with Lewy Body Dementia. Born on October 16, 1938 in DC to Douglas and Grace Trollinger, she moved to Northern VA while in her teens and graduated from Annandale High School.

Dorothy served as secretary to ARS Administrator and worked for USDA's Extension and Research Services where she was selected to model for "Research on Parade," traveling across the country to showcase newly created textiles made into the latest fashions.



She also served as a political appointee to USDA's First Assistant Secretary for Science and Education.

A member of St. Alban's Episcopal Church in Annandale since its founding, she served on the Vestry, was Senior Warden twice, and sang with the church choir for over 50 years. She also sang with the Fairfax Choral Society and the Alban Chorale.

Dorothy is survived by her husband, Bob, of 47 years; her mother, three siblings, four devoted children and seven grandchildren. A celebration of her life was held at St. Alban's Church in Annandale, VA, on November 19, 2016. In lieu of flowers, donations may be made in Dorothy's name to Capital Caring Hospice and St. Alban's Episcopal Church.

Lloyd E. McLaughlin, Editor

Lloyd E. McLaughlin, former Agricultural Research magazine science editor for the U.S. Department of Agriculture, died June 14, 2016. He was 83.

Lloyd was born on Feb. 26, 1933, one of the worst years of the depression. The local bank foreclosed on his parents' farm and sold it at auction. His stressed parents managed to purchase land near Norris, SD, and during World War II, with wheat classified as a strategic commodity, the family wheat farm prospered.

Life on a remote, non-electrified farm informed McLaughlin's character with patience and sharpened his mind. During the late 1940s, when his family moved to Clarkston, the quiet farm boy became the quiet captain of his high school chess team. McLaughlin commenced further studies at the University of Washington until the Korean Conflict, when he was drafted into the US Army.

Following his stint in Korea as a cryptographer, McLaughlin settled in Davis, CA. At UC Davis, he completed college on the GI Bill with a degree in Agricultural Economics.

Employed by the State of California, Mr. McLaughlin discovered his talent for construction, turning out a series of houses in the areas of Anaheim and Fresno—home designs. Only the lure of a federal civil service job could redirect his energy.

Later he was hired by ARS in Beltsville Maryland and became editor of *Agricultural Research*, the agency's premier science magazine. He served in that position for more than eleven years. While on the ARS Information Staff, McLaughlin met his second wife, Jeanne Stoll McLaughlin a writer-editor on the staff.

During retirement, the McLaughlins divided time between Greenbelt, MD and Lovettsville, VA. In addition to his wife of twenty years, Lloyd is survived by three daughters, and six grandchildren.

Dr. Herschel H. Klueter

Dr. Herschel H. Klueter, 83, died July 31, 2016 at a hospice residence in Battle Creek, MI. He had a long and productive career with ARS at Beltsville. A native of Edwardsville, IL, he completed his graduate studies at Purdue University and then was employed in 1959 by the Agricultural Engineering Research Division as a research agricultural engineer. His early work focused on conveyors for distributing farm feed, greenhouses for indoor gardens, and wind energy applications in agriculture. Later, he collaborated with William A. Bailey and Henry M. Cathey to conduct research on controlled lighting systems as they influence the growth and development of plants. They were well recognized for their work.

Dr. Klueter retired in 1989 and became a dedicated volunteer at Patuxent Wildlife Research Center. In 2008, he moved from Beltsville to Michigan where he passed away from heart ailments.

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NORTHEAST AREA DIRECTOR: Dariusz M. Swietlik

Friends of Agricultural Research—Beltsville, Inc.
P.O. Box 1061 • Beltsville, MD 20704-1061

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BARC Outreach: **Jim Butcher** jim.hickory@verizon.net

BARC Liaison: **David Chitwood** david.chitwood@ars.usda.gov

Publicity: **Hank Becker** hankbecker3@verizon.net

Webmaster: **Tasha Sprague** SpragueT@gmail.com

Board Members: **Ron Fayer** ronalfayer14@gmail.com

David Kuykendall davekuykendall6@gmail.com

Richard Zimmerman rhz1415@verizon.net



THE FAR-B NEWS

Dedicated to promoting the research and education programs of the BELTSVILLE AREA, Beltsville, MD

Friends of Agricultural Research-Beltsville, Incorporated P.O. Box 1061, Beltsville, MD 20704-1061

JUNE 2017

Editor: Hank Becker

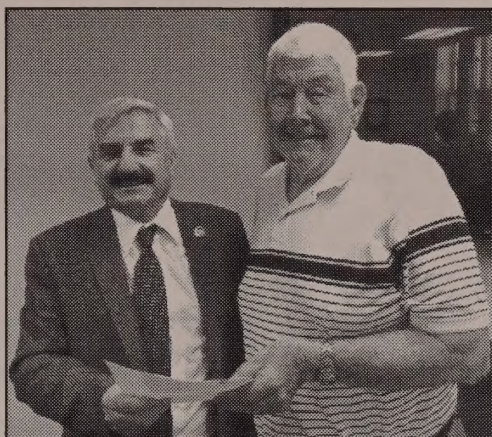
President's Message

I feel that it is important that FAR-B members be kept informed of our organization's recent contributions to Beltsville's research programs and outreach in the community. Individually the activities don't seem too significant, but cumulatively they are more impressive. Below is a list of activities that FAR-B has been engaged in during the past 12 months.

- Provided outside witness testimony to the U.S. House of Representatives and Senate Subcommittees on Agriculture, Rural Development, Food and Drug Administration, and Related Agencies and the Maryland Congressional Delegation on behalf on Beltsville facilities and research programs.
- Provided breakfast and participated in Beltsville's inaugural Maryland Agriculture Business Roundtable.
- Financially supported the Animal Biosciences and Biotechnology Laboratory sponsored Poultry Stakeholder Workshop: Northeast Area Council of Office Professionals Annual Workshop; and Swine Management and Husbandry Training.
- Funded four high school summer Interns to work in Beltsville laboratories.
- Arranged for food service and participated in the BARC Public Field Day.
- Provided financial support to the Bee Research Laboratory for the creation of a Pollination Garden.
- Facilitated a meeting with the Area Director and the President of the Central Maryland Chamber of Commerce.
- Provided financial support for outreach programs organized by the Northeast Area Task Force at Beltsville including: Black

History Month Observance; Women's History Month celebration; Beltsville Veteran's Appreciation Day; Summer internships for 38 college students from Hispanic Serving Institutions; 2016 Leaders of Tomorrow annual program; and, the Asian American Pacific Islander Heritage Month celebration.

- Awarded cash prizes to three high school interns with outstanding posters in the BARC Poster Day and provided lunch for participants.



President Allen Stoner presents Area Director Dariuz Swetzak a check for \$18,400 to support four student interns at ARS Beltsville laboratories.

- Provided refreshments for the BHNRC Poster Symposium.
- Provided financial support and teaching assistance for the visit of the Maryland Agricultural Education Foundation's Mobile Science Laboratory to the Beltsville Academy where 750 children were exposed to a "hands on" program on agriculture and science.
- Awarded prizes to participants of Prince Georges, Montgomery and Anne Arundel County middle school science fairs.

These activities were possible because on the membership dues and contributions of FAR-B's members and the work of its Board of Directors. Although our financial resources limit what we can do, a problem facing FAR-B is replacing ageing Board members. Without exception, the 12 retired ARS employees who are currently serving on the Board have a strong commitment to ARS and Beltsville and a strong desire to see their former employer continue to serve agriculture and the citizens of the country. The 12 had a combined total of nearly 500 years of service with ARS and were involved in a broad range of research disciplines, administration, and research supporting activities. Although there is no substituting for the institutional memory and broad experience that these

500 years of experience that our Board members draw upon, there is always a need for fresh ideas and experiences and replacing burnt out people. Thus, we are always looking for new members to serve on the FAR-B Board. In addition to the satisfaction of contributing to the Beltsville programs, serving on the Board allows us to remain somewhat abreast of what is going on at the Center. If you have an interest in serving on the FAR-B Board of Directors, please contact me.

Alan Stoner, President

Area Director's Message

Jitender Dubey, a research parasitologist with the Animal Parasitic Diseases Laboratory in the Beltsville Agricultural Research Center has been honored as a finalist for a Samuel J. Heyman Service to America Medal, also known as the "Sammies" in the category of career achievement. The Sammies are given to federal employees who have distinguished themselves in their service to the American People by making our country safer, healthier and stronger.

He discovered that *Toxoplasma gondii* (*T. gondii*), the parasite that causes toxoplasmosis disease, is spread by cats that prey on infected birds, mice and other animals. Cats spread the disease by excreting a special form of the parasite that survives outdoors for years. Pigs, sheep and goats ingest contaminated feed and water, get infected and spread the disease to people through infected and undercooked meat. The disease is especially dangerous to pregnant women who can pass it to their offspring, causing blindness and other serious birth defects in infants.

Dubey's discoveries helped reduce the prevalence of *T. gondii* by 50 percent in the United States and Europe and led to the development of preventive measures, for example advising pregnant women to

avoid changing cat litter boxes themselves. His another discovery that freezing meat overnight effectively kills *T. gondii*, has greatly curbed transmission. Dubey's research on another two parasites: *Neospora caninum* and *Sarcocystis neurona* considerably curbed losses in cattle and horses, respectively, and saved the respective industries millions of dollars.

The Twenty-Seventh Annual Beltsville Poster Day took place on April 26, 2017 at the National Agriculture Library. This is the third year now that the Northeast Area (NEA) of the USDA-ARS has been successfully operating under a new organizational structure. I am pleased to report that this change has enhanced the participation of scientists from outside of Beltsville.



President Allan Stoner recognizes Rita Gao of Oxon Hill High School for Poster Day's The Vernon Pursel Student Scientific Achievement Award.

This year's event also brought to the event scientists from the ARS locations in Newark, DE and Frederick, MD. The competition was very stiff and thus making the work of judging team very challenging. In the main division the first place went to Sean Boyle, USDA-ARS Beneficial Insects Introductory Research Unit, Newark, DE; the Second Place to Emma Thrift, Invasive Insect Biocontrol and Behavior Laboratory, BARC; the Third Place to Jenny Maloney, Environmental Microbiology and Food Safety Laboratory, BARC; and the Honorable Mention. To Hsin-Bai Yin, Environmental Microbiology and Food Safety Laboratory, BARC.

In the High School Division, the First Prize went to Rita Gao, Oxon Hill HS; the two Second Prizes went to Kayla Pasteur, Oxon Hill HS and Joy Regina Bernardo, Eleanor Roosevelt HS; and the Third Prize to Dajeong Kim, Eleanor Roosevelt HS. Congratulations to the winners. Also best wishes to all the participants of many successes in their quest for scientific excellence and future grand discoveries.

The Poster Day webpage is now updated with the photographs of winning presenters. Many thanks to Kerry Pedley of the Foreign Plant Disease and Weed Science Unit in Frederick, MD, this year's Poster Day Committee Chair, and the other members of the Or-

MEMBERSHIP RENEWAL APPLICATION

Personal Membership	\$ 30
Patron Membership	\$100
Sustaining Membership	\$ 500
	(or above)
Associate Membership (USDA employee)	\$15

Make checks payable to FAR-B, INC

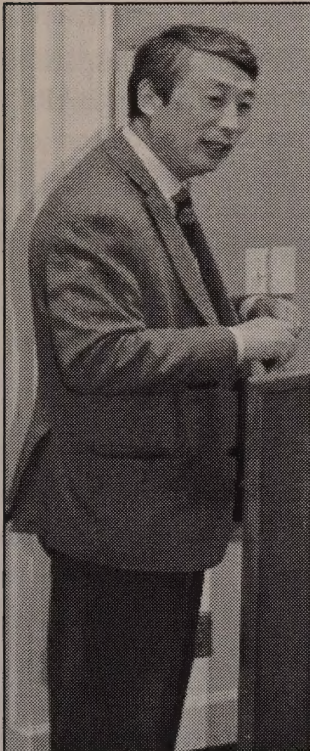
Return Membership Applications to:

**FAR-B
P.O. Box 1061
Beltsville, MD 20704-1061**

ganizing Committee for their hard work and successful execution of the event. We are especially grateful to the Friends of Agriculture Research in Beltsville (FAR-B) for their support of the event.

The week of May 22 saw the release of the President's budget for Fiscal Year (FY) 2018. The budget for ARS proposes program reductions totaling \$161.5 million. To meet this target, there are a total of 12 locations, 4 laboratory or Management Units, and 1 worksite proposed for closure across the entire ARS. None of these proposed terminations, however, impact employees and programs in the Beltsville Agricultural Research Center, Beltsville Human Nutrition Research Center and the US National Arboretum. The release of the budget is the first step in a budgetary process, the timeline of which is difficult to predict. We may see the first indication from the House and Senate Agriculture Appropriations Committees in June/July on how Congress reacts to the proposal. If the proposal is approved, the effective date would be no sooner than October 1, 2017.

Dariusz M. Swietlik, Area Director, NEA



BARC Director Gives Keynote Speech at BARC Annual Meeting

In his slide presentation, Dr. Howard Zhang said that the future holds many opportunities for which teamwork will be required. Also, he indicated that we can look to the future to be an extension and revision of the past. He presented classic photographs of the construction of Building 004 alongside Buildings 002 and 003, as well as the construction of 003. In 1910,

Dr. Howard Zhang, Director of the Beltsville Agricultural Research Center (BARC), on May 10, 2017 at the FAR-B annual meeting, gave a slide presentation on "Past, Present and Future of BARC."

the Animal Husbandry and Dairy Research Experimental Station was the beginning of BARC, and in 2010 we celebrated the Center's Centennial. Secretary of Agriculture Henry Cantwell Wallace oversaw construction of buildings at Beltsville in 1924, and in 1934 his son, Henry A. Wallace, Secretary of Agriculture at that time, established the Beltsville facilities as the National Agricultural Research Center, which included the Bureau of Soil in the Division of Natural Resource Management and the Division of Dairy Herd Improvement Investigations. BARC, now known as the Henry A. Wallace Beltsville Agricultural Research Center seems to have evolved as a conglomerate of at least four divisions representing major areas of agricultural research.

BARC is part of the Agricultural Research Service, and the primary goal or mission statement is to develop and transfer solutions to ensure high quality food and to sustain a competitive agricultural economy. Our vision is to lead America to a better future in terms of the quality of agricultural products and the efficiency and sustainability of their production. Challenges include the facts that the U.S. already has the most efficient crop production in the world and that the research budget has been flat for 10 years.

BARC has vintage infrastructure and a scientific staff that is advancing in age and which is increasingly eligible for retirement. Competition persists between mission-oriented basic, sometimes called "pure" research in laboratories and applied research, which often is translational research conducted in fields, with the former becoming less expensive while the latter, often resource intensive, becoming more costly.

"Do lab results translate to the field?" Dr. Zhang poses. A major situation is that team members must purposefully share credit so that each and every team member is appropriately recognized and rewarded for their respective contributions, Dr. Zhang emphasized.

Because our field research makes BARC unique, focusing on lab research may not help us. Dr. Zhang believes continuing to improve operational efficiency, investing in the science and our employees, while maintaining our distinctive singularity or uniqueness by promoting translational research and technology transfer are important. Reducing indirect research

costs to 21 percent, the national average in ARS, is a goal that has already saved 1.7 million dollars to invest in research, according to Dr. Zhang.

Having been the Beltsville Agricultural Research Center Director since January 8, 2017, Dr. Zhang sees that BARC is for everyone and that our future success will require accountability, responsibility and teamwork. "Our outstanding past accomplishments are a foundation for the future, and in the future we need to focus on research." Both original and translational research are needed to actually solve agricultural problems.

David Kuykendall, FAR-B Secretary

Financial Report

In the first half of 2017 FAR-B has an operating income of \$8,670. This included \$3,670 from dues and \$5,000 taken from funds in one Certificate of Deposit. Planned expenses for this calendar year will include support for four student interns at ARS Beltsville laboratories (\$18,400), awards for winners of the Ann Arundel Science Fair (\$440), support for Henry A. Wallace Scientific Poster event held on April at the National Agricultural Library which includes prizes for the top three High School Posters and refreshments (\$1,705), and support for various Beltsville laboratory program reviews (estimated at \$3,500). FAR-B projected budget deficit for 2016 is expected to be about \$15,000 when all expenditures have been made. We still have reserves held in Certificates of Deposit and in Mutual Funds of around \$100,000 which will continue support our program needs, when required. The FAR-B Board of Directors strongly believes that we can operate successfully by spending some of our reserves to better support agriculture research and outreach needs at Beltsville.

Richard Parry, Treasurer

Pollinator Garden at the USDA-ARS Bee Research Laboratory

The Bee Research Laboratory hosts numerous public visits, ranging from local students to international delegations, governmental employees, and beekeepers. We have initiated an outside pollinator garden adjacent to the laboratory along Powder Mill



Road on the BARC-East campus. The 1500-square-foot garden is directly across from the USDA Log Lodge. Along with providing nourishment for our bees, this garden will be used for education purposes and for field studies of flower choices by bees.

With local horticultural expertise (especially Dr. Francisco Posada and Mr. Kyle Grubbs in the BRL), and assistance from the BARC Farm crew, we have broken ground and have planted both seeds and plants. With support from FAR-B we will be able to diversify the garden, acquire tools, and support a summer intern to expand and support the garden. Support from FAR-B was essential in our planning of a more ambitious garden and also gave us strong support in working with the Center leadership for necessary permissions.

This project will provide a demonstration space for our pollinator research, an evolving image for BARC visitors and commuters, and a source of pride and joy for the BRL and BARC. We have united with the Beltsville Human Nutrition Research Center to also plant and emphasize bee-pollinated plants that are key parts of the human diet.

Current plants include Blackeyed Susans, sunflowers, mints, *Liatris*, and a commercial pollinator blend. We will host an 'Open Garden' on June 20, from 2-4 pm. All FAR-B members are welcome.

Jay Evans, Research Leader
USDA-ARS Bee
Research
Lab



Dr. Francisco Posada and Mr. Kyle Grubbs.

Dear President Stoner and FAR-B membership,

We must applaud you for your continual support of the outreach and collaborative efforts of the scientific community in Beltsville. Your unwavering dedication in no small part has made the programs that we spearheaded successful.

We here in Beltsville have coordinated an Agricultural Research Learning Experience (ARLE@Beltsville) in conjunction with USDA-NIFA's Division of Community Education for Hispanic Serving Institutions (HSIs) under the direction of National Program Leader Dr. Irma Lawrence for the past 5 years.

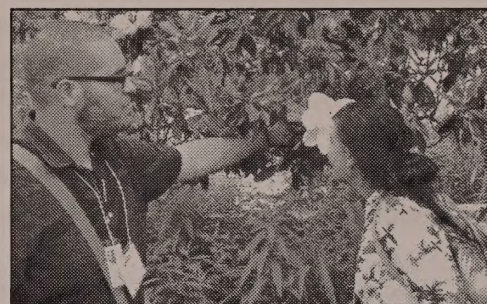
This employee organized and ran endeavor is a part of the Department and Agency's initiatives associated with accountability, program delivery, and employment of minorities in support of ARS' civil rights goals. We have had an opportunity to provide an 8-10 week overview of our programs, hands-on learning experiences, and group activities to enhance knowledge of research as it relates to ARS programs and future careers in agricultural research to more than 100 students from HSIs across the country during this time. This year, we have 23 students coming from 8 different institutions to share in the program. All of them have been matched with outstanding SYs to mentor them through their projects. The students are at various stages of their academic career (undergrad freshman through PhD) and from many different disciplines, therefore have been placed throughout areas. This continues to be a phenomenal learning experience for both students and mentors which contributes to the Area's goal of increasing collaborations and diversity.

FAR-B members have helped make all of these endeavors successful with their constant support. We anticipate that our efforts will inspire a diverse community of future scientists to see the wealth of possibilities in Agricultural Sciences and FAR-B will be an integral part of that achievement. Again, we applaud your dedication to promoting the importance of Agricultural Science through outreach.

Thanks,

Verneta Gaskins,

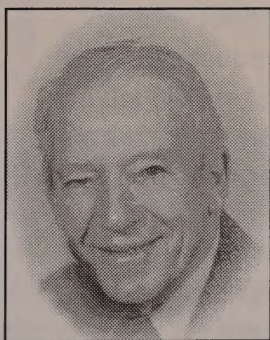
Plant Pathologist, USDA-ARS, Northeast Area



2016 ARLE@Beltsville student participants on National Arboretum garden tour.

IN MEMORIAM

Francis J. Longen



Mr. Francis (Frank) Longen was born September 23, 1922, in Eureka, South Dakota and passed away peacefully in his sleep on March 3, 2017, at his home in Ellicott City, MD.

Most of Frank's early years were spent in Gregory, SD. Following high school, he

worked for a local bank before enlisting in the U.S. Army Signal Corps. He later transferred to the Army Air Corps. After his discharge in 1946 he moved to the Washington, D.C. area where he accepted employment with the U.S. Department of Agriculture. Frank also attended George Washington University in the evenings, majoring in Business Administration.

While working at the USDA, Frank met and soon married Helen A. Diehl, of Schellsburg, PA. They spent more than 60 years living in Adelphi, MD, where they raised three children.

Frank's entire career was with the USDA's Agricultural Research Service in the field of personnel administration, where he retired as Director of Personnel Division for ARS in 1979. During his retirement years, Frank was active with Colesville Meals-On-Wheels and served as an Officer and Board member of FARB. Frank enjoyed woodworking and home improvement. Frank and Helen both enjoyed traveling, gardening, and dancing.

Frank was a member of St. John the Baptist Catholic Community in Silver Spring where he was also active with the St. John the Baptist Council on the Knights of Columbus. After their recent move to Ellicott City, Frank became a member of Church of the Resurrection Catholic Church.

Just five days after Frank's passing, his wife of 63 years, Helen, followed him to their eternal home. Frank is survived by Deborah Judy (Chris), Roberta Saah (Michael), James Longen (Julie); grandchildren, Dana Judy, Nicole and Michelle Saah, Christopher Longen (Jessica), Jenna and Luke Longen; great-grandchildren, Benjamin, Avery, and Sawyer. Interment private.

Dr. Albert E. Herner

Dr. Albert E. Herner, 86, passed away on April 23, 2017, at The Village at Rockville after complications related to dementia. Dr. Herner was a lifelong lover of animals who lived throughout the U.S. and in Belgium before settling down in Maryland in 1972. He made his name as a biochemist by studying blood proteins, including research which discovered the important role played by hemoglobin A1C in human blood chemistry. He established a medical reference laboratory in Rockville, MD, and finished his career as a researcher at USDA, where he helped put together a reference book, *Pesticide Properties in the Environment*, which identifies pesticide pollution.

Dr. Herner was born in Brooklyn, NY on January 23, 1931, and grew up in Queens, NY. He studied chemistry at Union College in Schenectady, NY (B.S. 1952), received an M.S. in biochemistry at New York University (1954), and then completed two years of military service in the U.S. Army, stationed in New York City. He went on to earn his Ph.D. in biochemistry at Florida State University in 1960. At FSU, he studied with acclaimed chemist Dr. Earl Frieden. In the late 1950s and early 1960s, Herner and Frieden coauthored important papers in the journals -- *Science*, the *Journal of Biological Chemistry*, and *Archives of Biochemistry and Biophysics*. All articles continue to be cited decades after their publication.

In 1965, Herner accepted a position at the New England Nuclear Corporation in Wellesley, MA. In 1972, he moved to Maryland and established the Herner Analytics medical reference laboratory in Rockville. From 1988 to 1998, he worked for the Department of Agriculture's Agricultural Research Service where he assisted with the analysis of crop samples from all over the country to collect data used to establish crop pesticide tolerances for edible fruits and vegetables.

Max J. Paape

Dr. Max J. Paape passed away at the age of 80 (December 26, 1936 – May 26, 2017.) He had a great career at Beltsville and made many noteworthy contributions to ARS and the U.S. dairy industry. His son Mark wrote "Dr. Max J. Paape has gone to rest. It's over for him after a very long ordeal. He is free...What an incredible story this man had.

Please continue to believe this was for the best given the situation. We thank you all for your support...Your attention, love and compassion have been incredible over the past week. He endured a harrowing struggle and is free to rest. Your love and messages have all been forwarded on to my family. We will cherish them, and you, always."

Memorial contributions may be made to both or either: Friends of Agricultural Research at Beltsville via www.far-b.org; or, the H. Allen Tucker Memorial Lectureship at: www.givingto.msu.edu

ARS Announces New Scientific Impact Video Series

The Agricultural Research Service (ARS) is pleased to debut a video series highlighting important scientific advances that occurred because of ARS research. This first *YouTube video* highlights ARS' role in large-scale commercial production of penicillin. While discovered in England, the ability to mass-produce penicillin occurred in the United States at an ARS lab in Peoria, IL. Andrew Moyer, in his Peoria laboratory, discovered the process for mass producing penicillin.

This video showcases one of the many advances made by our Agency that touches American lives daily. Each dollar invested in ARS research results in \$17 of economic impact.

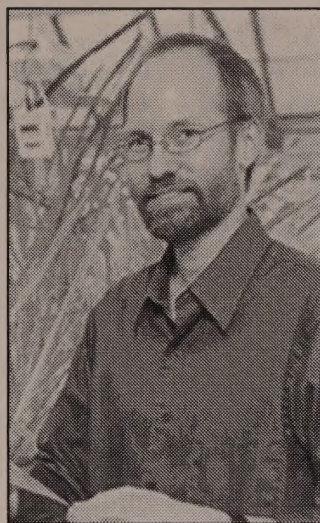
Please visit the USDA YouTube channel <https://www.youtube.com/usda> in the future for more videos in this series.

Jan Suszkiw, ARS Office of Communications

Go to www.far-b.org/renewal.html & pay with credit card

Name: _____
Address: _____
City: _____ State: _____ Zip: _____
email: _____

ARS Geneticist Receives First National Academy of Sciences Prize in Food and Agriculture Sciences



ARS geneticist Edward Buckler is the first person to receive the National Academy of Science's (NAS) Prize in Food and Agriculture Sciences. Buckler will be recognized for pioneering the use of large-scale genomic approaches linking genes with the crop's physical traits. This work is giving plant breeders' better access to key genes and reducing the time needed to improve critical traits that enhance food security.

Buckler, an NAS member, works at the ARS Plant, Soil and Nutrition Research Unit in Ithaca, NY. He began his large-scale genomics work by developing an encyclopedic amount of information relating the 40,000 genes and nearly 2.3 million base pairs in the maize genome to specific traits in the field. Then, to manage the mountain of data such work generates, he created software packages and algorithms that automate the screening and analysis of the genetic diversity. This makes it possible for even modest breeding programs to efficiently identify and select the parents most likely to produce offspring with new and improved traits.

Buckler and his collaborators have already developed non-genetically engineered maize varieties with 15 times the typical level of vitamin A—providing a solution to a common sight-threatening deficiency in the developing world. He and his group also have addressed other agricultural traits crucial to improving food security, such as local adaptation, drought tolerance and disease resistance. Accelerating such variety development is vital to food security in the United States and elsewhere.

A champion of open data and innovative partnerships, Buckler has developed software and other techniques for analyzing natural genomic diversity freely available. His software is downloaded more than 20,000 times a year and has been applied to more than 1,500 species. It has even affected the study of the human genome, mostly focused on the finding the genetic basis of human disease. The methods that he and his team have developed are applied to all areas of genetics including medicine, agriculture and conservation.

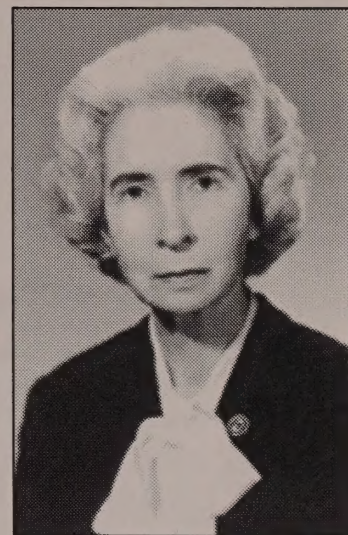
The NAS Prize in Food and Agriculture Sciences recognizes research by a mid-career scientist at a U.S. institution who has made an extraordinary contribution to agriculture. The prize is endowed through generous gifts from the Bill & Melinda Gates Foundation and the Foundation for Food and Agriculture Research.

Kim Kaplan, ARS Office of Communications

National Inventors Hall of Fame Honors ARS Scientist

In May, ARS Chemist Allene Rosalind became the newest member of the National Inventors Hall of Fame during ceremonies at the National Building Museum in Washington, D.C. She is receiving the award posthumously.

Dr. Allene Rosalind Jeanes, who died in 1995, used her background in carbohydrate chemistry to save countless lives on the battlefields of Korea and during the years that followed. Jeanes studied how bacteria could produce polymers in corn, wheat and wood. Her research led to the discovery of ways to mass-produce dextran, a type of polymer, for use as a blood volume "expander" to sustain accident and trauma victims suffering from significant blood loss. The methods Jeanes developed led to commercial-



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THE FAR-B NEWS

Dedicated to promoting the research and education programs of the BELTSVILLE AREA, Beltsville, MD

Friends of Agricultural Research-Beltsville, Incorporated P.O. Box 1061, Beltsville, MD 20704-1061

JANUARY 2018

Editor: Hank Becker

Stephen Taylor Receives the Aileen Lee Support Staff Award

Several years ago, ARS Secretary Aileen Lee left a generous bequest of \$40,000 to FAR-B. After much deliberation, the FARB board voted to use her gift to support training and advancement of Office Professionals at Beltsville. They established a scholarship to promote the advancement of office professionals through training--defined in the broadest sense. This included leadership courses, details and other forms of specialized training. About \$5000 yearly was approved by the FAR-B board to support this training award.

In 2017, FARB President Allan Stoner announced that Stephen Taylor, Secretary of the Animal Parasitic Diseases Laboratory (APDL) was selected for the award. Stephen received a check for \$2,400 for tuition and books for his studies on Bio-defense Strategy at George Mason University during 2017. He will be awarded the same amount this year.

Stephen Taylor says, "As the Secretary, my primary responsibilities include booking travel, managing time and attendance, managing acquisition requests, gathering information and routing requests for incoming and outgoing funds, organizing performance reviews, routing potential visiting scientists through the approval and on boarding processes, and facilitating personnel actions (i.e. changes in schedule, hiring, separations)."

He added, "I also serve as a Collateral Duty Safety Officer for APDL to ensure facility compliance with regulations related to chemical and biological hazards.

Additionally, I was appointed to the Northeast Area Diversity Committee to help foster recruitment and inclusion of a diverse USDA workforce. I took a leading role in the development of the committee charter."

"Finally, during my tenure at APDL," he adds, "I have performed laboratory rotations to better understand our scientific approaches to the organizational mission."

He says, "As a current Master's Degree Candidate in George Mason University's Biodefense program, in the upcoming fall semester, I plan to take Biodefense Strat-



Stephen Taylor

egy and Global Health Security Policy. Biodefense Strategy is a course that examines policy strategies for strengthening defenses against, improving intelligence about, and increasing oversight of infectious pathogens and biohazardous materials. Global Health Security Policy is a course that focuses on strategic analysis of infectious disease outbreaks, global health governance, and U.S. health security policy at home and abroad."

"These courses are highly relevant to the mission of the Agricultural Research Service and the Department of Agriculture. Infectious diseases incur a great cost to American agriculture. Well-conceived and appropriately implemented Biodefense policies are a bulwark against this threat. Upon completion of my Master of Biodefense, I hope to assume a position in policy analysis either with ARS or at USDA headquarters in Washington, D.C. The Aileen Lee Scholarship would be a boon in my goals to earn a Master's degree and advance within USDA while incurring as little debt as possible. In the meantime, the knowledge gained from these courses would make me a more valuable asset in carrying out the Animal Parasitic Diseases Laboratory's mission and help me expand the roles of my current position," he added.

"I'd like to reiterate how grateful I am for FAR-B's support with the Global Health Security Policy course, which gave me a strong foundation in global health governance. In addition to classroom instruction, the professor, Dr. Jamechia Hoyle, helped me secure fellowship funding to attend the 4th Annual Global Health Security Agenda Ministerial Meeting in Kampala, Uganda. In Uganda, I had the opportunity to meet with global health security leaders such as Dr. Brenda Fitzgerald, Director of the Centers for Disease Control and Prevention, and RADM Tim Ziemer, the first coordinator of the President's Malaria Initiative. This opportunity to experience global health security policy making firsthand would not have been possible without the Aileen Lee Award," Taylor added.

continued on page 8 — See "Taylor"

A Year of Diversity Program Successes

To highlight a few of the successes...The 2017 Special Emphasis Programs held at Beltsville, enabled our workforce to coordinate enriching, educational and cultural programs. Hundreds of employees and community participants have been able to interact and learn about the diverse heritage of our workforce and the value that they bring. We are so grateful to have all of our observances supported by FAR-B, which include: African American / Black History Month; Women's History Month, Asian Pacific Islander Heritage Month; LGBT Month, Hispanic Heritage Month, and Native American Heritage Month.

We are also grateful to FAR-B for supporting the 2nd Annual Veteran Employee Appreciation Program. The purpose of this program is to recognize and support the veterans in the Northeast Area workforce who have protected and served our country, here and abroad; to enhance the

knowledge of our workforce related to historical contributions and current initiatives of our valued employees and their former careers in the Armed forces. Our goal is to become a diverse workforce and to more effectively support the communities that we can serve, including veterans. Thank you, FAR-B for supporting our Veterans!

For the ninth year, FAR-B has supported the Leaders of Tomorrow program. The *Leaders of Tomorrow* are a diverse group of interns/students ranging from Biological Science Aids, who work next to ARS scientists to administrative clerical support who assist in the very important day-to-day operations of the administrative offices and laboratories. The *Leaders of Tomorrow* coordinate the program, utilizing the diverse talent from within the student committee which includes several cultures and ethnicities currently placed at our centers in Beltsville. The purpose of this pro-

gram is to raise awareness of public service, making a difference as a public servant and the need for our future leaders to embrace this mindset as it relates to a diverse workforce and the broader community that we can serve; contributing to the cultural transformation of the USDA. The additional goals of this program are to raise awareness of cultural diversity in the workplace, encourage collaboration and to build character of our *Leaders of Tomorrow*.

We have additional programs for 2018, which include American Indian students from New Mexico, ARLE – serving Hispanic interns from various colleges and universities, summer interns supported by FAR-B and so much more! Stay tuned...

Jenny Allen, *The Special Emphasis and Veteran Appreciation Committees / Northeast Area's Office of Outreach, Diversity and Equal Opportunity*

2ND ANNUAL VETERAN EMPLOYEES APPRECIATION PROGRAM



EDITH BLACKWELL



TUNESHA PHIPPS



LOIS BARBER

MEMBERSHIP RENEWAL APPLICATION

Personal Membership	\$ 30
Patron Membership	\$100
Sustaining Membership	\$ 500
	(or above)
Associate Membership (USDA employee)	\$15

Make checks payable to FAR-B, INC

Return Membership Applications to:

President's Message

I am pleased to report that after 33 years, FAR-B continues to support research, educational and outreach programs of the Agricultural Research Service at Beltsville. However, over time there has been an evolution in the type and scope of the activities that FAR-B is involved in.

After FAR-B was created in 1985, one of its primary activities was to support the annual multi-day Beltsville Symposium that focused on topics of major scientific importance or interest and the publication of the resulting proceedings. Over the years, FAR-B also worked extensively with Beltsville scientists and management units to assist with other conferences, workshops, and special events. These activities were often made possible in large part by significant financial contributions by agricultural or scientific organizations and corporations.

Several years ago, the Beltsville Symposium series was discontinued and over time the number of conferences and other scientific meetings organized by Beltsville scientists has declined significantly. Also, as the Beltsville research programs and the corporate world priorities have changed, the financial support of FAR-B has evolved to where we now rely primarily on personal and associate membership dues, CFC contributions and an occasional individual donation.

Hence, FAR-B generally receives fewer requests for support of research related activities and has less operating funds to work with. Today, FAR-B largely uses its funds to support student-oriented activities, special emphasis and diversity programs for Beltsville employees, and only occasional requests by management units for assistance with specific research projects. One important activity that FAR-B continues to remain engaged in is providing annual written testimony to the U.S. Congress on behalf of the Beltsville facility and its research programs. Many of the activities supported over the past 6 months are described elsewhere in this newsletter.

Alan Stoner, President

Area Director's Message

As the old year was coming to an end and the new started arriving, BARC saw a flurry of activities. Stephen Censky, the Deputy Secretary of Agriculture came to visit the Center on January 8. The visit, which occurred in only two months after his appoint-

ment, attests to the importance of agriculture research plays in Deputy Secretary Censky's agenda.

It was an intense and very informative visit that started in BARC-W in building 003 where Dr. Chavonda Jacobs-Young, the ARS Administrator, briefed him on ARS's mission and introduced other ARS officials as well as NEA and BARC leadership. A windshield tour through BARC-West and East campuses abounded in the historical background on how BARC evolved over the years as well as the past and current research accomplishments and their impact. A stop at BHNRC in Bldg. 307B, gave him the opportunity to meet scientists and support staff and take a look at laboratories and other scientific infrastructure. We also talked about the renovation of the nearby Bldg. 307. The group then proceeded to the George Washington Carver Center for lunch.

On January 5, we hosted Maryland Senator James Rosepepe, representing District 21, Prince George's County and Ann Arundel County. Senator Rosepepe is a well-known face at BARC as he has visited our campus many times before. He was given a tour of the facilities and was briefed on the current and potential future infrastructure developments on the campus. It also was an opportunity to inform him on our research program and its impact on the stakeholders, customers, and public in general.

By the end of November, Dr. Paul Sebesta, an Associate Area Director announced his retirement, effective the end of 2017. He began his tenure with ARS in 2005 as the director of the USDA-ARS Kika de la Garza Subtropical Agricultural Research Center in Weslaco, TX. He graduated from the SES-CDP in August 2008 and served as the Acting Center Director at the Eastern Regional Research Center in Wyndmoor, PA from April to October, 2008. In November 2008, Dr. Sebesta was named the Director of the National Center for Agricultural Utilization Research in Peoria, IL. In September 2016, he assumed his position of Associate Director for the Northeast Area. We congratulate Dr. Sebesta on his career with the USDA-ARS. Also, we wish him all the best in his retirement. He will be missed by his friends and colleagues.

Dr. Sevim Z. Erhan began serving as the Northeast Area's (NEA) Acting Associate Area Director for 120 days effective January 7, 2018. She has a B.S. and M.S. degrees in Chemical Engineering from the University of Istanbul, Turkey, 1980 and a Ph.D. degree in Organic-Polymer Chemistry from Western Michi-

gan University in Kalamazoo, MI in 1987. She was a Postdoctoral Associate, Research Scientist, and Research Leader at the ARS National Center for Agricultural Utilization Research in Peoria, IL, from 1988 to 2008. In 2008, Dr. Erhan became the Center Director of the ARS Eastern Regional Research Center in Wyndmoor, PA, the position she occupies now. Her research areas encompass Vegetable Oil Based Industrial Products, including printing inks, paints, coatings, lubricants, biodiesel, hydraulic oils and composites. She has authored or co-authored over 250 scientific articles, including 9 U.S. Patents, 2 books and 25 book chapters. She has been invited to present her research findings at more than 200 national and international scientific meetings. She has received several Agricultural Research Service awards and industrial awards including: Land of Lincoln Soybean Association Market Award; U.S. Department of Agriculture, Agricultural Research Service Distinguished Service Award; Federal Laboratory Consortium Award for Excellence in Technology Transfer; United Soybean Board Outstanding Achievement Award; and Oil Technologists Association of India KT. Achaya Award; Fellow, Society of Tribologists and Lubrication Engineers; Fellow, American Oil Chemists Society; and the Federal Laboratory Consortium Laboratory Director of the Year Award.

Dariusz M. Swietlik, Area Director, NEA

Financial Report

During the calendar year of 2017, FAR-B received \$6,380 in dues and donations and received \$3,037 from the Combined Federal Campaign (CFC). FAR-B also received interest income from bank Certificates of Deposit (CD) and dividends/capital gains from mutual funds of \$10,518. Expenses for 2017 exceeded total income as planned by the Board of Directors so we needed to dip into our reserves for \$37,034 from a maturing CD to cover current and future expenses.

FARB's biggest expense was sponsoring four student summer interns (\$18,400). Other expenses include sponsoring the annual poster day at the NAL (\$1,944), funding the Diversity Task force programs (\$1,984), providing partial support for Maryland Agricultural Education Foundation science trailer at the Beltsville Academy (\$600), providing educational support for a technical support person who received \$2,390 for continuing education under the Aileen Lee Program. Administrative expenses for printing and mailing the newsletter, post office box rental, and as-

sistance preparing the tax return were \$2,312. Total expenditures were \$29,294. FAR-B currently has \$42,227 in two CDs, one will mature in December 2018. We also hold shares in two mutual funds, whose market value totals \$27,322. The budget plan for 2018 approved by the Board will also have a deficit, but sufficient funds are held in the current account and reserves that will cover the deficit.

Richard Parry, Treasurer

CFC Update

The FAR-B Board of Directors appreciates its supporters who contributed to the 2017 CFC Campaign. Preliminary information indicates that donations are approximately \$5,000, which is an increase over the approximately \$3,000 received for the 2016 campaign. We hope this trend continues as the funds are directed to promoting agricultural research, education and outreach at BARC, the Beltsville Human Nutrition Research Center, and the U.S. National Arboretum.

The FAR-B CFC number is 40122, and until the 2018 campaign in the fall, we encourage you to renew memberships or consider becoming a member by visiting our website at far-b.org, where you will see details of many of our activities.

Dave Prevar, CFC

FARB Funds Four HS Students as Summer Interns

During the summer of 2017, FAR-B provided \$18,400 funding for four students from local high schools to work as interns in Beltsville Laboratories.

Audrey Randall, a May graduate of Eleanor Roosevelt High School, was mentored by Dr. Xiangwu Nou of the BARC Environmental Microbial Food Safety Laboratory.

Immanuel Ndumbe, a May graduate of Charles Herbert Flowers High School was mentored by Dr. Eton Codling of the BARC Adaptive Cropping Systems Laboratory.

Erin Rao, a senior at Atholton High School was mentored by Dr. Qi Huang of the US National Arboretum Floral and Nursery Plants Research Unit.

Nancy Anabaraonye, a senior at Eleanor Roosevelt High School was mentored by Dr. Rumana Yasmeen of the Beltsville Human Nutrition Research Center Diet, Genomics and Immunology Laboratory.

The internships provided the students an opportunity to learn a wide variety of skills by working with scientists in a research environment, make some spending money or possibly funds for college expenses, and help Beltsville scientists with ongoing research projects or special projects ancillary to their primary research.

Without exception the students received high marks from their mentors for their work. Mr. Ndumbe and Ms. Randall are currently enrolled as Biology and Microbiology majors, respectively, at the Universities of Maryland and Virginia.

Alan Stoner, President

Mobile Science Lab Returns to Beltsville Academy



During the week of November 28 to December 2, 2017, FAR-B continued its long-running science enrichment outreach to students of the nearby Beltsville Academy. BAC, as the school is informally known, is a local public school of some 1,100 mostly minority and immigrant pre-kindergarten through 8th-grade students.

FAR-B is pleased to have helped organize and

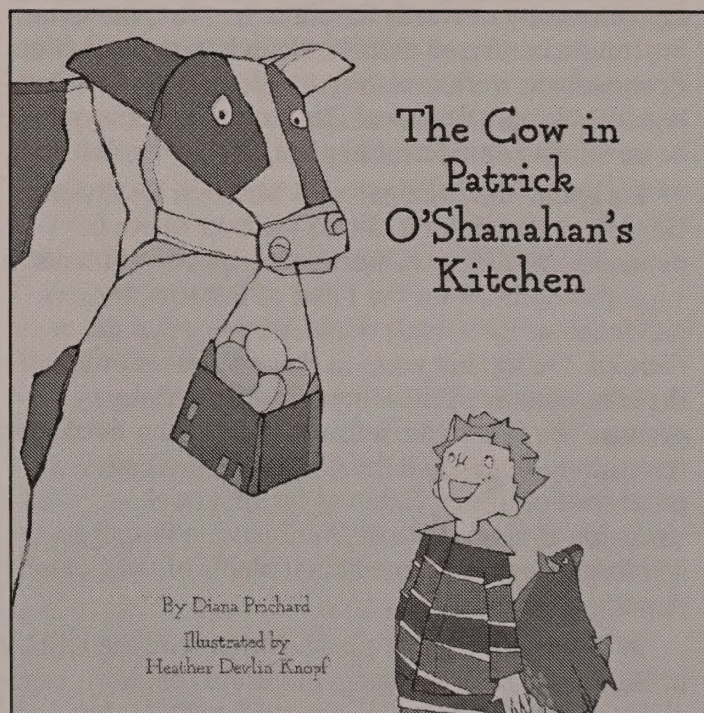
sponsor an informal working arrangement among FAR-B, the Beltsville Centers, BAC, the school Parent Teachers Association, and the Maryland Agricultural Education Foundation to bring a full school-week of agricultural science enrichment to the Beltsville Academy each year. The science enrichment classroom arrives on campus in the form of a Mobile Science Laboratory mounted on trailer wheels.

This year, 4th and 5th grade students worked through a hands-on science lab exercise called "Fiber Up For A Clean Sweep." Students performed scientific investigations to determine the presence of insoluble fiber in six frequently consumed foods. Of the foods tested, Shredded Wheat was determined to have the highest fiber content (good) and popcorn the lowest (bad).

Students in kindergarten through 3rd grade did the lab exercise "The Cow In Patrick O'Shanahan's Kitchen." After enjoying a delightful, but realistic fiction tale by Diana Prichard about a French boy who one morning finds a COW in his chef father's kitchen, students discovered some amazing cow facts and then made real butter from heavy whipping cream.

Cow author, Diana Prichard, is a farmer and author who writes from the intersection of farm, fork, and family life. When she was young, her mother told her to grow up and marry a hog farmer. When she couldn't find one who she liked she became one instead. She did, however, find an engineer suitable to her taste in husbands.

Jim Butcher, BARC Outreach



IN MEMORIAM

Jim Duke

One of the giants of the herbal movement of the past century, James A. Duke, PhD, who was 88, died peacefully on December 10, 2017.

Jim served as one of the founding members of the Board of Trustees of the American Botanical Council. His impact and inspiration for the last three generations of all aspects of the herbal community cannot be overstated.

Perhaps more than any other individual, Jim Duke, personified the coalescing of science with traditional knowledge on medicinal plants, which he freely shared with passion and heart. He was a prolific "compiler" of data on medicinal plants, which he shared an estimated 3 dozen books, both popular and technical.

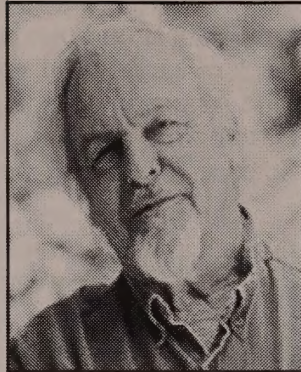
Jim Duke, was a key figure of the "herbal renaissance," a phrase coined by Paul Lee, PhD. He was a renaissance man in the broadest sense.

Born in Birmingham, AL, on April 4, 1929, Jim Duke was a bluegrass fiddler by age 16, even appearing at the Grand Ole Opry, in Nashville.

An interest in plants was not far behind his interest in music. In 1955, he earned a degree in botany from the University of North Carolina. In 1961, the same institution conferred a doctorate in botany upon him. Postgraduate work took him to Washington University and Missouri Botanical Garden in St. Louis, where he developed an interest in neotropical ethnobotany.

Early in Duke's career with Missouri Botanical Garden, his work took him to Panama where he penned painstaking technical descriptions of plants in 11 plants families for the Flora of Panama, project, published in the *Annals of the Missouri Botanical Garden*. During his years in Panama he also studied the ethnobotany of the Choco and Cuna native groups. The Choco are a forest people who lived scattered along rivers, and the Cuna live in villages. Another fruit of these years was his first book — *Isthmian Ethnobotanical Dictionary*, a 96-page handbook describing medicinal plants of the Central American isthmus.

In 1963, Jim Duke took a position with the USDA in Beltsville, MD, focusing on tropical ecology, especially seedling ecology. From 1965 to 1971, he

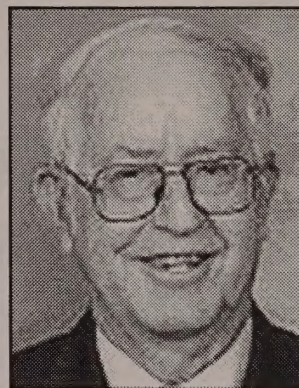


worked on ecological and ethnological research in Panama and Colombia for Battelle Columbus Laboratories. Duke returned to USDA in 1971 where he worked on crop diversification, creating a database called the "Crop Diversification Matrix" with extensive biological, ecological, and economic data on thousands of cultivated crops.

In 1977, he became Chief of the Medicinal Plant Laboratory at USDA's Agricultural Research Service in Beltsville, and then Chief of USDA's Economic Botany Laboratory. At the time, USDA was under contract with the National Cancer Institute to collect plant materials from all over the world for screening for anti-cancer activity. After the program ended in 1981, Jim Duke continued his work at USDA as Chief of the Germplasm Resources Laboratory, collecting data and plant material on food crops from around the world.

Dr. Duke retired from USDA in September of 1995, but retirement was in name only. Jim is survived by his wife Peggy, daughter Cissy, and son John.

Robert Hoover Miller



Robert Hoover Miller (age 82) of Alexandria, VA, passed away on Sunday, May 28, 2017. He was born on June 8, 1934, son to the late Henry Eugene Miller and Margaret West Miller. He grew up on a small farm in Rowan County, NC. After graduating from Mount Ulla High School in Rowan County, he received a B.S.

in Agriculture from NC State University in 1956 with High Honors, followed by a M.S. from Michigan State University in 1958 and a Ph.D. from North Carolina State University in 1962.

Robert was employed as an Animal Geneticist and Research Leader, Agricultural Research Service, Beltsville Agricultural Research Center, USDA from 1960 to 1996. Robert received a Group of distinguished service award from Secretary of Agriculture Madigan in 1990.

He also served as a biometrician and research geneticist before being appointed chief of the Genetics and Management Laboratory in Beltsville in 1972. In 1979, Miller became the research leader of the Milk Secretion and Mastitis Laboratory and remained in that position for 23 years until his retirement.

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Early in Bob's ARS career, he devised a new genetic experimental design for estimation of non-additive genetic variation in animals. He also conducted extensive research on methods to increase the accuracy of genetic evaluations of dairy bulls and developed the formulation and implementation for the first national dairy cow evaluations. He conducted a series of studies to quantify milk yield impact from increased milk somatic cell count and bacterial infection as well as a series of studies to determine whether mastitis defense mechanisms were inherited.

More than anyone else, Bob was responsible for initiating the dairy genomic research at Beltsville. He led a team that found several genetic markers that were associated with mastitis resistance. His research on mastitis also included an investigation of the effect of intra-mammary devices on milk yield and a quantification of the role of teat canal keratin in mastitis defense. His later research focused on trends in death losses and abortion frequency of dairy cows.

Dr. Miller's sustained research productivity is documented in 131 peer-reviewed scientific articles, 20 conference-proceedings papers, 19 Federal Government technical reports, and 142 scientific abstracts. The American Dairy Science Association (ADSA) inducted him into the 100 Club for authorship of more than 100 peer-reviewed articles in the *Journal of Dairy Science*.

Bob was a member of the American Association for the Advancement of Science, and the American Genetic Association and served on the Research Committee of the National Mastitis Council. He was consulted by animal scientists worldwide for research planning, analysis, and data interpretation. He also fostered an active cooperative research program with the Department of Animal Science at the University of Maryland. After retiring from ARS in 1995, Miller continued to contribute to dairy science research as a volunteer at the Animal Improvement Programs Laboratory in Beltsville, MD.

He became the Senior Editor of Symposium Proceedings "Biotechnology's Role in the Genetic Improvement of Farm Animals" published by the American Society of Animal Science, Savoy, IL in 1996.

Robert and his loving wife Vivian Johansson Miller were members of First Presbyterian Church of Howard County, MD. He was former Deacon, Elder and Church Treasurer, at the Church of the Pilgrims, Wash. D.C. After retirement, he graciously gave his time as a volunteer with the Foreign Information and Referral Service in Columbia, MD, and pursuing his many hobbies, including Folk and Bluegrass Music; Greek Art and History; and Genealogy.

Robert McNeer Faust

Robert McNeer Faust, 78, formerly of Adelphi, MD, died on Saturday, Aug. 26, 2017 at his home in Hanover, PA. He was a member of FARB.

Born March 25, 1939 in Washington, D.C., he was the son of the late Ralph L. and Mattie S. (McNeer) Faust. Robert was the loving husband of Cheryl J. (Davis) Faust, with whom he shared 41 years of marriage.

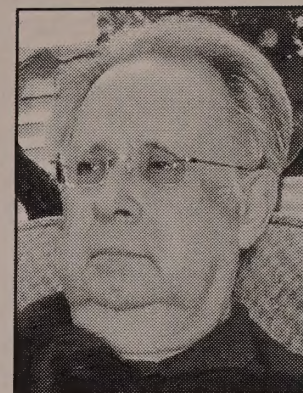
Robert was a 1957 graduate of Woodward Prep School, Washington, D.C. He received his B.S. in Biological Sciences in 1963, an M.S. in 1967, and his Ph.D. in 1970 in Entomology, Microbiology and Biochemistry from the University of Maryland.

Robert worked as a scientist for 46 years at several ARS Beltsville laboratories: the Market Quality Research Laboratory from 1959 to 1960; Bioenviron. Bee Laboratory from 1960 to 1961; Research Molecular Biology Insect Pathology Laboratory from 1961 to 1988; chairman Biosafety Committee from 1977 to 1989, and a National Program Leader, National Program Staff, from 1988 until his retirement.

He received numerous agricultural technology transfer awards; and a proclamation of the Dr. Robert M. Faust Day in Hawaii Award given by the governor, Linda Lingle, and the lieutenant governor, James R. Altona Jr., for leadership in area-wide pest management for the agriculture industry

He worked as member part-time faculty Prince Georges Community College, Largo, MD from 1964 to 1984. He was a visiting scientist at the Armenian Academy of Sciences, Institute Microbiology, Russia, in 1976. He was a member of the Executive Board at the Center Biological Control Mosquitoes, Ben Gurion University, Israel, since 1981. He was a visiting scientist at the Korean Institute of Science & Technology, Seoul, in 1985.

In addition to his loving wife Cheryl, Robert is survived by his children, Dawn M. Darr and husband Leo P. Jr. of Edgewater, Md., David R. Faust and wife Tammy of Odenton, Md., Tammy L. Potter and husband Larry D. Jr. of Midland, Va., Barbara A. Garrison and husband Joel F. Jr. of Edgewater, MD, and Sean C. Faust of Odenton, MD; stepsons, Michael O. Morris and wife Michell of Hagerstown, MD, John F. Morris of Linthicum, MD; and, seven grandchildren.



FARB Summer Intern Successful

The Hispanic Serving Institutions initiative at BARC has a success story. HSI alumna Ruby Rivera-Cruz has landed the position of Project Manager of the Global Diversity, Equity and Inclusion Team at the Nature Conservancy's headquarters located in Arlington, VA.

Ruby was one of my summer interns at IIBBL in 2014. Her present success is a testament to Ruby's personal drive; the support she received from the University of Puerto Rico and FAR-B; and the dedication of BARC staff who embraced the HSI initiative, working tirelessly to clear bureaucratic hurdles to get them into the sponsoring labs, and then make the interns feel at home at BARC and the US National Arboretum.

Ruby says she "is working on developing a partnership program between TNC and community-based environmental organizations, particularly communities of color (Hispanics, African Americans, Native Americans, etc.)."

She adds, "The Nature Conservancy has worked for decades in complex partnerships for land and water protection, however, many of these relationships have not traditionally carried the voice of disenfranchised communities most likely to be impacted by environmental issues."

Matt Greenstone, Retired ARS Entomologist

Fresh Local Strawberries at Christmas, Thanks to ARS Researcher

Kimberly Lewers, a plant breeder at BARC, dreams of strawberries that taste like "a crystalline sugar cubes," with a hint of creaminess, a touch of tartness and a sudden burst of juiciness. And she wants to make them available in the Mid-Atlantic in November, even December.

Offseason strawberries are not known for such great flavor. They come from too far away and are bred for sturdiness. But she's betting her career that locally grown fall and winter fruit will one day rival the most sumptuous June berries.

She is using clear plastic tarps pulled tight over thigh-high, yard-wide hoops that act like mini-greenhouses. When the temperature drops below freezing, she sprays the tunnels with warm water to take the chill off. As a result, ice builds up. Nonetheless, the tunnels have put year-round strawberries in reach of the Mid-Atlantic and other eastern states.

"Just smell them," she says. "Just in time for Thanksgiving."



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"Taylor" — continued from page 1

Stoner added, "We hope that other office professionals in the geographic Beltsville location who are eligible apply for this award. This includes the Henry A. Wallace Beltsville Agricultural Center, Human Nutrition and National Arboretum Labs located at Beltsville. Award will be based on the goals of the applicant and their need for the training. Applicants can be self-nominated or nominated by their supervisor. Initial approval will be needed from both the applicant's supervisor and Area office. Final selection will be made by a FAR-B committee. At the end of their training, awardees will give a presentation to the FAR-B board based on the training they received. Anyone interested in applying should contact FAR-B or any board member."



Taylor on his Uganda trip in front of the Ziika forest, where major research is being performed on the vector transmission of the Zika and Yellow Fever Viruses.